

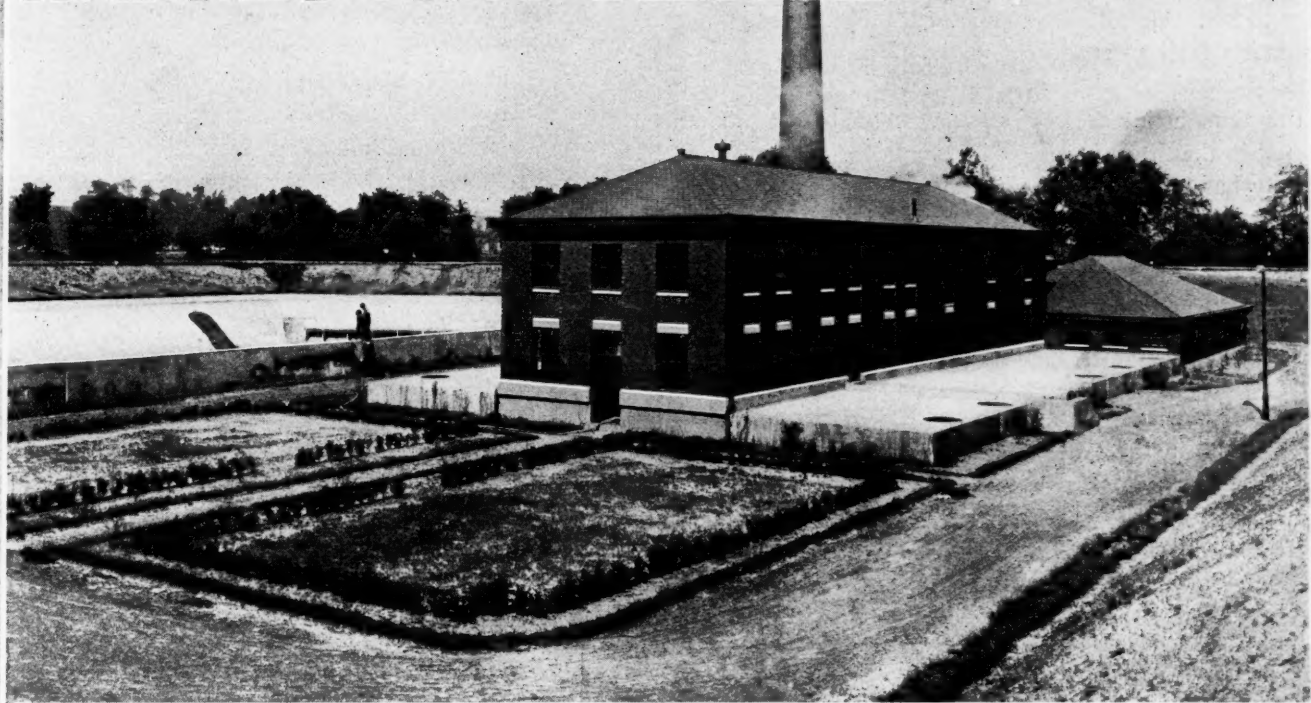
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HARRISBURG'S FILTRATION PLANT



THE report of the filter plant of the Harrisburg, Pa., municipal water supply for 1907 shows excellent results obtained during that year. This plant was first put in operation in October, 1905, and this is therefore the second full year of its service. The plant is located on an island in the middle of the Susquehanna River and is surrounded with dykes about 16 feet high for protection against floods. In the operation of the plant unfiltered river water is pumped into a sedimentation basin containing about four million gallons, from which it flows to the coagulation or secondary basins, of which there are two, each 33 by 45 feet, and thence to the filters. In operating the plant it is the usual custom, provided for by the arrangement of construction, to apply a portion of the coagulant to the water as it enters the sedimentation

basin and also a further amount as it enters the coagulation basin.

During the year the basins removed an average of 57.96 per cent. of all the bacteria. In the month of August no coagulant was applied to the water as it entered the sedimentation basin and the bacterial efficiency of this dropped to 17.07 per cent. The filters removed 99.04 per cent. of the bacteria which passed the basins, and the bacterial efficiency of the plant as a whole was 99.59 per cent., the average number of bacteria in the filtered water being only 44 per c.c.

To produce these excellent results it was necessary to use only a little over one grain per gallon of sulphate of alumina as a coagulant, the amount varying from 0.58 to 2.73 grains. The sulphate of alumina used was basic,

containing not less than $17\frac{1}{2}$ per cent. available alumina.

The water used for washing the filters amounted to a little over $2\frac{1}{2}$ per cent. of the total amount filtered, and the average time between washing filters was about $12\frac{1}{2}$ hours.

The filtered water reservoir has a capacity of twenty million gallons, equal to about two days' supply. It is uncovered, but up to the present time there has been no trouble with algæ growths.

The Susquehanna River water which this plant filters is unusually variable in character. The turbidity caused by rain is at times gray, at others red and again black, while combinations of any two or all of these may occur at any time, the prevailing color depending upon the section from which the soil has been washed by the storm which causes it. During the year the bacteria in the river water varied from 190 to 158,000, the average being 10,712. The turbidity varied from 3 to 2,250 parts per million, averaging 16. The alkalinity varied from 7.6 to 91 parts and on 35 days was so deficient that it was necessary to add soda to the water in order that the sulphate of alumina used as coagulant might be properly decomposed by the alkali.

At no time during the year was any sulphate of alumina detected in the filtered water. The removal of color and turbidity has at all times been 100 per cent. The number of bacteria in the filtered water varied from one to 610 per c.c., the average being 44. Presumptive tests for *B. Coli-communis* gave positive reactions in less than one per cent. of the samples examined, which numbered 1,683.

The sedimentation and coagulating basins were cleaned twice—in August, when over 30 inches of deposit was removed, and in the latter part of November, when approximately 300 yards of sand and coal were taken out. A sand ejector was originally used for this work, but was found too small and a 20-horsepower gasoline engine, operating a centrifugal pump with 5-inch suction, the whole mounted on a covered scow, was used instead in the November cleaning, showing a saving in time and expense.

Experiments in precipitating silt in the sedimentation basin by use of coagulant were continued throughout the year and the average application of coagulant was about one-half to the water as it entered the sedimentation basin and the remainder as it entered the coagulating basin. It is believed that additional sedimentation facilities, secured either by placing baffles in the present basin, the building of an additional basin, or both, might be beneficial. The application of alum before the water reaches the sedimentation basin at times when the river is very turbid results in the loss of coagulating material by a portion of it being taken down by the quickly falling sediment. In addition to the loss of alum this heavy deposit of sand and fine particles of coal requires much more time and expense in its removal from the present basin than the silt which is formed over the bottom of the balance of the basin. These conditions could be overcome by the construction of an additional basin, not a large one

necessarily, but one into which the water could be pumped as it comes from the river, in which the heavy sediment would be immediately deposited. Thus a smaller application of alum would be required, all the dose being available for the work intended, and the work of the filters themselves would be lessened.

In February and March the turbidity of the water was very low and the bacterial content fairly high. Ordinarily the sedimentation in the basin removed a considerable percentage of the bacteria, but as there was little sediment during these months, the amount of alum was increased from the customary dose of one-half a grain to $1\frac{1}{2}$ grains, but without satisfactory results. The application of clay to the water as it entered the basin from the river, however, produced greatly improved results and sufficient was added through a period of some days to raise the turbidity from five parts up to 20 parts per million. The completion of this test was prevented by a sudden rise in the natural turbidity of the river, but further tests of the advantages and disadvantages of this use of clay will be made this year. Of the local clays which were tried, the best results were obtained from the material used for manufacturing red brick.

During the year the typhoid deaths among the residents of Harrisburg numbered sixteen, of which five were railroad employees whose occupation constantly took them from the city; three had been there too short a period to contract the disease and two obtained their water supply from contaminated wells, which leaves six deaths which were not presumably traced to some known source other than the city water supply.

The operating expenses of the filter during the year were \$20,783.59, made up of the following items: Alum, \$6,205.89; soda, \$293; coal, \$2,306.46; oil and waste, \$285.72; supplies, \$874.32; repairs, \$913.96; laboratory, \$1,616.80, and labor, \$8,287.44. The total number of gallons filtered during the year was 4,068,656,500, of which 107,100,150 were used for washing filters. The average cost of treatment per million gallons delivered to the pumping station was therefore \$5.23; that of the alum being \$1.56; soda, 7 cents; coal, 58 cents; oil wastes, 7 cents; supplies, 22 cents; repairs, 23 cents; laboratory, 41 cents, and labor, \$2.09. The sinking fund appropriation for the filter loan was \$10,333.33, interest \$10,850 and State tax \$1,240, making the fixed charges \$22,423.33 and the charge per million gallons \$5.68. The total cost per million gallons was therefore \$10.91.

ASPHALTIC CONCRETE PAVING IN DALLAS

THE City of Dallas, Tex., is testing on Griffin street a pavement which they hope to find an improvement upon their ordinary macadam streets and which City Engineer Dalton hopes will prove a success, as the paving cement used is a product of their own State. This pavement, which they call asphaltic concrete, is composed of tough trap rock from the quarries of Little Rock, Ark., and asphalt produced from Texas petroleum oils at the refineries at Fort Noches, Texas. This asphalt

forms 7 per cent. of the mixture and is claimed to be 99½ per cent. pure. The refining is done, not by destructive distillation, but by oxidizing by the aid of heat at a temperature of 450 degrees F. The remaining 93 per cent. of the concrete is composed of broken stone and sand.

A charge composed of the substances above described is placed in a revolving mixer, where it is heated by an air blast producing a temperature of about 450 degrees, and thoroughly mixed, and is discharged from the drum into wagons and delivered onto the street. It is there spread to the required thickness, which on Griffin street was six inches, and is rolled with a tandem roller giving a compression of 250 pounds per inch of width, which forces the liquid asphalt to the surface, thus making it smooth. After cooling, it is rolled with another roller giving a compression of 450 pounds to the inch. The asphalt used in this street has a very high melting point and is ductile at zero temperature.



GRIFFIN STREET, DALLAS, TEXAS

This pavement was constructed by the General Supply and Construction Company of Dallas. For the above information we are indebted to City Engineer E. L. Dalton.

NEWPORT PLAN VS. GALVESTON PLAN

Abridged from Paper Before National Municipal League by
Rear Admiral F. E. Chadwick, U. S. N. Retired,
Member Newport Representative Council

THE nineteenth century city of America is really in competition with the city of like modernity in Europe; if we have failed to do as well in city design, architecture or administration the fault is not in our newness. . . . The failure is due, with so much else, to unintelligence in our city government. Why have we failed where Europe has, in so much greater a degree, succeeded? In my view, the main cause has been in placing city administration, business of the greatest technicality and difficulty, in the hands of short-term and accidental men. Associated with this unwisdom has been the equally unwise course of adopting for cities our State and Federal forms of a president and a lower and an upper house, but putting aside their great and distinguishing characteristic not only in State and Federal usage,

but in town meetings as well, viz., the separation of the appropriating and spending powers. Our City Councils as a rule combine these, thus traversing a principle which it took centuries of struggle to establish, and which to-day rules in every civilized government. . . . It would seem that nothing is more fully established as a great fundamental principle than that the same men cannot with safety be allowed to lay the taxes, make the appropriations and spend the money. Our city charters, in running directly in face of this principle, cause us to reap the necessary results of its violation.

Touching the question of permanency of office, it is equally extraordinary that a people of our undoubted business ability should have regarded, throughout our municipal history, the administration of cities as a by-play for men, most of whom are already overburdened with business cares. They were to do the work of administration in many cases for nothing, and where paid the compensation is so meager that it is a mere honorarium rather than a salary commensurate with the work done or expected to be done.

Men must be paid either in honor or money, or somewhat in both, and in addition they must, if of position and character, feel that they are not temporary stop-gaps. As we well know, the honor connected with municipal office is unfortunately not reckoned now at a high figure. In many cases municipal office is allied with an impression of disreputability.

The business of the modern city is too great to expect in this commercial country that good men will be found of such altruism as to devote, without adequate payment and security of tenure, their whole time to the public good. If we are to improve, we must necessarily turn to business methods something like the British, German, and other advanced European systems, which involve the desiderata I have mentioned, viz., honor and adequate emolument, as well as permanency.

A vital point is to stop putting into city administration haphazard, ephemeral and untrained men. They must be trained and must be practically permanent. The German system usually makes the appointment one of twelve years, it always being understood that the appointment is renewable if satisfaction be given. The mayor or burgermeister is elected for his ability without regard to his habitat. He may, if he acquires a reputation, be called from place to place. He is in fact an employee. . . . The administration of the English town is practically in the hands of a body of permanent experts appointed by the Council, much as in Germany. The Council is supervisory, much as in the latter country.

When we consider the enormous and complicated business involved in the administration of a great city, the idea of putting into the offices of administration men of a day, with no experience of administration, with no idea of seeking office but for party purposes or for the moderate income attached, is not sanity. Ability and training are necessary, as well as character. The first two are naturally the product of time; in other words, of experience. I would thus suggest the appointment or

election, by whatever method should finally be thought best, of the Mayor and an Assistant Mayor, and of all heads of administrative departments, for not less than ten years. Over these men should be a large council, large enough to be fairly representative. There is no reason why, so far as manageability is concerned, it should not be as large as the Congress of the United States, which, after all, is not larger than a fully attended town meeting of a town of 1,500 inhabitants. This Council should have full control of all legislative business; no member of the Council should have any administrative functions.

In the Newport system the Representative Council, broadly speaking, has the powers of a town meeting, and the Board of Aldermen, of which the Mayor is a member and also presiding officer, the powers of selectmen. The number 195 was fixed upon as large enough to be fully representative of the people, not too large for effective control in meeting, and also as being the multiple of 13 and 39, the latter being the number elected for each ward, one-third renewable yearly.—(*For a description of the Newport plan, see Municipal Journal and Engineer, January 8.—Ed.*)

It will be seen that the system developed in this charter is one of extreme simplicity. It unites all legislative power in a single body, and establishes a small committee to carry the authority of this body into effect; it brings back to the people in a very effective degree the authority which has been taken from them by political rings and combines; it separates the municipal from State and National elections; it separates the power authorizing the spending of money from the power which expends, thus vastly increasing the difficulty of a vicious combine. In the words of the "Explanatory Statement," which accompanied the act when brought before the Legislature, it "is absolutely open to the knowledge of all the people; gives the right to every one to speak upon any proposition; allows no opportunity to stifle any question; makes it easy for any one to bring forward any subjects for consideration; opens the budget to full inspection and discussion by the people before it is adopted; in a word, makes the public the master it should be in all questions affecting its civic welfare." Its one defect, so far as I can see, is in its short terms for the executives and technical staff.

I would desire to say, with all possible emphasis, that the Galveston system appears to me a step backward to the dark ages of government. Its general adoption would be a move to an entire disruption of our American polity. . . . It is not only the complete negation of the great principle of the separation of the appropriating and spending powers, but it is the removal from the people of the duties of citizenship, which every man should share to the fullest degree for which we can arrange.

If we are to preserve our governmental system, it is impossible for us to ignore the educational effect on the people of an active and constant participation in their public affairs. This is the very life-blood of popular government. Never was it more necessary for us to hold firmly to this great principle. We are adding to our population a million foreigners a year, a vast majority of

whom are a peasantry subordinate to leaders by long centuries of habit, wholly alien to the ideals of government which have come to us from our Teutonic forebears, and with no sense of responsibility for our public life. We are rapidly filling our great cities with men whose only idea of government is to be governed. Des Moines does somewhat better than Galveston. She gives a broad referendum and initiative; but it is easy to see that the difficulty and expense of a frequent reference to the whole electorate of a large city will go far to nullify the plan. I think that it will not, in this respect, bear comparison with the Newport system. In one case the system is cumbersome, difficult of full and reasonable discussion, and expensive; in the other there is primarily a full discussion by a large, select body, which may end the matter, with no expense, or if it goes to the people, it does so with a full understanding on their part of all the arguments. It seems to me that there can be no question as to which system will give the sounder results.

The grave question we are facing in advocating such a system as that of Galveston is whether we are preparing to cut adrift from our ancient ways and return to personal government. For more than two hundred years the dominating idea in America has been the principles represented by the New England town meeting, and which in essentials is the principle of the referendum in its fullest development. Any step away from this constant touch with the people is a step backward and toward evils from which society took hundreds of years to escape. Our greatest problem is to give the people full opportunity to express their will, of which now they have so little chance, and the want of which makes so often our State and National Legislatures anything but truly representative. For there is no true ideal of government which does not include a reasonably quick response to the popular will.

No man can consider the possibilities involved in a general acceptance by towns of such a system as that of Galveston, which is clearly, to my mind, a step toward the despotizing of our institutions without calling a halt to take thought. There is in the air a growing idea that a strong-man government is a desideratum. If the Galveston government is good for a great city, why is it not good for one of our States, some of which have less population by far than some of our great towns? Shall we have it in the States and not at Washington? Why not do away with Legislatures and Congress and elect Governors and a Council and a President and a Cabinet and let them have the law-making power, the taxing power, the appropriative power as well as the administrative power? There would certainly be no difference in principle from that at Galveston; why should there be any in the working?

I believe that in Newport we have taken the better way. Our Representative Council is our Congress; our Mayor and Aldermen are our President and Cabinet. They are analogues of that which obtains throughout our State systems, with the added benefit of closer touch with the whole people, through our initiative and referendum. The system has eliminated politics, has worked admirably thus far, and bids fair to continue so.

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It is also desired that the facilities furnished by the reference library in this office should be widely known and freely used by those interested in municipal affairs. Visitors will be welcomed and provided with conveniences for search, and inquiries by mail will be promptly dealt with.

MARCH 25, 1908.

CONTENTS

Harrisburg's Filtration Plant. (Illustrated).....	357
Asphaltic Concrete in Dallas. (Illustrated).....	358
Newport Plan vs. Galveston Plan.....	359
Tributes Exacted by Urban Development.....	361
Public Baths in Boston.....	361
Reducing Water Consumption.....	361
News of the Municipalities.....	362
Legal News—A Summary and Notes of Recent Decisions.....	367
Municipal Appliances. (Illustrated).....	369
News of the Societies.....	370
Personals	371
Trade Notes	371
Patent Claims	371
Incorporations	371
The Week's Contract News.....	372

Tributes Exacted by Urban Development

On another page is given a statement showing the cost of filtering water at Harrisburg last year to have been about \$11 per million gallons, which is about the same rate as in most other cities. Last week reference was made to the contract under which Reading's sewage is purified at the rate of \$18 per million gallons, which is approximately the cost of such service. The two would amount to a total of about \$1.50 per capita per annum. These classes of expenditures are regarded by many taxpayers as unwarranted impositions—almost robbery. But in reality they are as legitimate a part of the expenses consequent to concentration of population in cities as are improved street paving and street cleaning (which cost the largest American cities, in 1904, \$5.16 and \$0.79 per capita, respectively), high rents and increased expenses in all directions. The tributes thus exacted are small compared to the financial and social advantages which such concentration offers.

Public Baths in Boston

DURING the first nine months of 1907 in the ten public baths of Boston 575,852 baths were taken. The greatest number during any one month was in July—74,389; but June and August were almost as popular. The least number was in February, when 51,174 baths were taken. A singular fact is the much larger ratio of males to females in the warmer than in the colder months. In most of the baths the number of female bathers was but one-half to one-third as great in August as in January, while the number of male bathers was, in most cases, greater. Of these ten baths, six are in gymnasiums and two are connected with schools, these last two having been opened one in March and the other in April. In only two of the bath-houses was the number of baths taken as large in 1907 as for the corresponding period of 1906. The least number taken in any one month in any bath was 962; the greatest number was 30,822.

Reducing Water Consumption

In a paper on water waste investigations before the Connecticut Society of Civil Engineers, Ermon N. Peck of Hartford described the efforts made in that city to reduce the water consumption. In 1900 the department had two inspectors who regularly covered the city twice a year on the assessment plan, and while these men knew that many leaks existed and that gross abuse prevailed in the way of permitting faucets to run to prevent freezing of pipes in very cold weather, their duties were too arduous to allow them to make detailed inspection for the purpose of detecting these sources of waste. Accordingly ten additional inspectors, one for each ward, were employed, who shortly gave good accounts of themselves in the number of premises reported where water waste occurred. These reports, coupled with a recent shortage, spurred the Board of Water Commissioners to adopt the policy of general metering of service pipes. It was planned to complete metering the city in about three years and this was very nearly accomplished.

In 1900, 550 meters were put in service, or about 6 per cent. of the services. The consumption then was about 84.6 gallons per capita. By the end of 1903 there were 9,156 meters in use, the number of services being 9,683, and the per capita consumption had been reduced to 75 gallons. In 1907 there were 10,623 services and 10,433 meters and the per capita consumption had been reduced to 59.1. The reduction in consumption has been due not only to meters, but partly to rigid waste and leak inspection. Meter readers inspect the premises on their routes, and the water mains, services, hydrants, etc., are inspected regularly by men whose sole duty this is.

The department requires all meters to test, on full flow, not less than 98 per cent. of the flow and not more than 100 per cent. Five-eighths inch to one inch meters must register on a one-thirty-second inch stream, or with a flow of .023 cubic feet per minute. All meters are supposed to be tested at least once in four years.

NEWS OF THE MUNICIPALITIES

Divers Subjects of General Interest and Their Treatment by City Councils and Officials—Streets, Water Works, Lighting and Sanitary Matters—Police and Fire Items—Government and Finance

ROADS AND PAVEMENTS

More Men Required for Paving Work

Altoona, Pa.—Mr. Streffler, of the Gantz Construction Company, which has extensive contracts in Altoona, is of the opinion that the exodus of Italian laborers has been so great during the past winter that there is likely to be difficulty in supplying labor of the semi-skilled class for paving work during the coming summer. While there may be sufficient men unaccustomed to the work ready to try it, the Italian and Slav labor is likely to be missed.

Interest Charges and Contract Prices

Bay City, Mich.—Financial losses, due to the city's custom of paying contractors in orders for sums due on their work, have led local bidders to take this item into account in future tenders. Nominally, the orders pay 5 or 6 per cent. interest, but the payments are often delayed six months or more by the city's failure to collect from property owners. In the meantime, a contractor, in order to get cash, puts the order in the bank as security for notes and pays 7 per cent. interest in advance. Ordinarily, payments are made by the city in cash, but owing to the failure to sell bonds the use of orders has been resorted to. About \$55,000 of this paper is now in the hands of contractors.

Property Owners' Committee Reports on Pavements

Bayonne, N. J.—A good old-fashioned paving war has been waged over the selection of material for Broadway. At a recent Council meeting, a report of the Broadway Improvement Committee was received, after the members had made trips to New York City, Staten Island, Boston and Worcester for purposes of inspection. Briefly, their report is that macadam is not to be considered, as the traffic is too heavy; granite blocks are too noisy and dirty; asphalt and bitulithic are classed together as lacking durability and slippery; brick and asphalt blocks are pronounced suitable for the residence streets only. The recommendation is made that wood blocks be laid on the downtown half of the street and Hassam pavement on the uptown end. The section of Broadway to be paved includes 82,000 yards.

Four Streets Missing

Cincinnati, O.—Several entire streets of Cincinnati are reported as mysteriously missing. Mayor Markbreit and the Municipal Engineer studied directories and maps in an attempt to find Wayne, McGregor, Faehr and Quebec streets, for which new electric light ordinances had been passed. They could not find the streets, and the Mayor vetoed the ordinance.

Paving Problems Confront City Authorities

New Orleans, La.—The advisability of advertising for bids for street paving is under consideration. The city authorities are anxious to go ahead with improvements. Property owners on Carrollton avenue want their street paved from St. Charles avenue, in Carrollton, to the City Park, a distance of several miles. There is no difficulty about financing the property owners' share, the difficulty arises in regard to the items for subdrainage and the intersections. The subdrainage will be paid for by the Sewerage and Water Board when bonds are sold. The paving of intersections comes out of certain so-called reserve funds, which have been spent in advance for the next two years. Capt. William J. Hardee, City Engineer, wants to be assured that contractors will bid before he advises advertisements.

Prize Offered for Best Sidewalk

Pensacola, Fla.—Unusual interest is sought to be given to the building of sidewalks by the offer of a prize by the Nelson Brothers' Paving and Construction Company for the best piece of work in this line to be finished by April, 1909. The prize of \$100 is to be given to the property-owner, and the question of which contractor does the work is not to be considered. For judges, the contestants may select one each, from the City Council, the Board of Public Works, Board of Bond Trustees, County Commissioners and Chamber of Commerce.

City Buys Gravel Beds

Phoenix, Ariz.—With a view to securing better streets at a moderate cost, Mayor Coggins has consummated the purchase of forty acres of gravel beds four miles from the city. Negotiations are progressing with the Maricopa and Phoenix railroad officials to build a spur track to the beds and install a steam shovel for loading cars. The plan is to sell part of the gravel to the county and to the towns of Tempe and Mesa, both of which intend to improve their streets.

Wooden Sidewalks Prohibited

San Francisco, Cal.—The Building Laws Committee of the Board of Supervisors has resolved to recommend an ordinance prohibiting the laying of wooden sidewalks in yards, alleyways or premises in the city limits. Earth, sand, cement or concrete walks will be permissible.

Looking Over the City Streets

Washington, D. C.—The District Subcommittee of the House Committee on Appropriations is making daily trips of inspection around the city looking for streets that are in poor condition. It is pretty generally conceded that the members of the subcommittee will not have any trouble in finding all they care to look at. The subcommittee will soon get together and begin the work of perfecting the District appropriation bill. It is generally understood the recommendations of the commissioners will be scaled down, on account of existing conditions, notwithstanding that it is generally understood work and material can be secured at a much more reasonable price for the same reason.

SEWERAGE AND SANITATION

Would Establish Health Department

Auburn, N. Y.—An act amending the city charter to create a Department of Health, with a single-headed Commission, has been passed by Council, and will be submitted to the Legislature for approval. According to the act, the Commissioner must be a physician, with five years' experience.

Dead End of Main Causes Typhoid

Elgin, Ill.—Several cases of typhoid fever occurring in the plant of the Western Gas and Electric Company are attributed to the use of water from a dead end of a city water main. Besides the employees taken sick, a man from a neighboring plant who has been in the habit of using drinking water from the electric works has also developed typhoid. It seems that a large main comes up to the works, and from that a small pipe runs to the faucet from which the men drink.

Sewerage and Health Boards Combined

Trenton, N. J.—The State Senate has passed Senator Robbins' administration bills, abolishing the State Sewerage Commission, and conferring all its powers on the State Board of Health, which is to be reorganized. The offices of both Commissions, as they now exist, are vacated on the passage of the bill.

Will Dredge City Docks Gratis

Philadelphia, Pa.—A proposition has been submitted to Director Grady, of the Department of Docks, by which a promoting company offers to dredge all the city docks, where there are sewer ends, free of charge, in return for the excavated material, which it proposes to use for fertilizer. A city bulkhead on the Schuylkill River has been designated for the experiment. Probably a year will be taken by the company in making experiments, by which time it hopes to have ordinances passed by Councils to allow it to operate at all the docks. The city would save more than \$50,000 in actual cost of dredging by this plan.

Federal Government Refuses Sanitary Aid

Oakland, Cal.—At a special meeting of the City Council, Mayor Frank L. Mott submitted all the correspondence which passed between Secretary Cortelyou and himself relative to the request of the city for Federal aid in maintaining proper health conditions. Secretary Cortelyou stated that the city's request could not be acceded to on the ground that such action would set a precedent which might, in future, place the Government in an embarrassing position.

Ventilation in Public Meeting Places

Paterson, N. J.—In the course of a discussion by the Board of Health regarding a resolution providing that all places of amusement be ventilated in a manner provided by the Board, the resolution being aimed particularly at the moving picture show houses, the fact developed that the statutes do not give the Board authority to prescribe methods of ventilation, although it may abate nuisances. Council, however, might refuse to grant licenses to public meeting places not ventilated in accordance with the rules established by the Board of Health.

WATER WORKS**Valuation of Water Works Excessive**

Cortland, N. Y.—The Cortland Water Commission, in reporting on the conditions relative to municipal ownership, states that it considers the valuation of \$350,000, placed by the local company on its works, as too high. Two alternatives remain—either to build a new plant or to take the present plant by condemnation proceedings. The first proposition is now being looked into in detail, as the Commission does not wish to resort to condemnation proceedings except as a last resort.

No Bids for Water Works Franchise

Elkhart, Ind.—The Board of Public Works received no response on March 11 to its advertisements for bids for a twenty-five-year water works franchise, to date from April of next year. Not even the Elkhart Water Company, its franchise then expiring, submitted a bid. The Board is in a quandary.

Placing of Meters to Prevent Waste

Norfolk, Va.—The problem of how to make less than 4,000 water meters prevent the waste from 11,000 water taps is causing considerable vexation to members of the Board of Control. Naturally, differences of opinion exist as to where the meters should be placed. After consultation with officials of other cities, the Board formed the opinion that the principal waste occurred in residences where there are a number of servants, and they have acted accordingly. Besides, they have metered railroad stations, all barrooms, soda fountains, boarding houses, apartment houses, banks and stores.

State and City Boards Join in Inspection

Lynn, Mass.—The Committee on Water Supply of the Massachusetts Legislature, which has under consideration important legislation affecting the future of Lynn's water supply, has decided to pay an official visit to the filtration plant at Lawrence, Mass., and has invited the members of the Lynn City Council to be present. On the recommendation of Thomas F. Porter, Council unanimously voted to accept the invitation. The Lynn water sheds and storage basin will also be visited.

Investigation of Electrolysis in Newark

Newark, N. J.—Chief Engineer Morris R. Sherrerd, of the Board of Public Works, and Engineer Sanzenbacher, of the Water Department, have become alarmed at the effect electrical currents being returned to the traction powerhouse of the Public Service Corporation has on the cast-iron water pipes, and Mr. Foss, an electrical engineer of Boston, Mass., has been engaged to make an investigation and suggest remedial measures. In the past ten years mains in Hamburg place have been renewed three times, and before the traction company laid subways in Center street it was found that pipes had become dangerously soft through decomposition produced by electricity passing through the ground. Some time ago the traction company, at the suggestion of Mr. Sherrerd, installed a generator at the River street station, and water pipes were charged with a current as strong as that passing through the feed wires, so as to produce a neutral condition, but the plan did not work out satisfactorily because of difficulties in governing the offset current.

City Water Works Plant Defeated

Galion, O.—The City Council has granted a new franchise to the Galion Water Works Company, after a continuous controversy for more than two years, during which a strong effort was made to establish a municipal plant. The new franchise is for twenty-five years, and provides for a reduced schedule of rates for both public and domestic service.

Water Supply for Utica

Utica, N. Y.—A bill has been introduced in the legislature authorizing the Mayor of Utica to appoint a Commission to investigate plans for acquiring a municipal water supply. In order to be fair to neighboring villages likely to be annexed to Utica at some future time, one of the members of the Commission will be a resident of the suburbs. Utica is one of the few cities of its size in the country not owning its water works.

Will Build an Experimental Filter

Winona, Minn.—Under the direction of a Chemical Engineer sent by the State Board of Health, the Board of Municipal Works will construct and operate an experimental filtration plant, in an effort to arrive at a solution of the problem of how to get pure water. The trial plant will have a capacity of 1,000 gallons. Although there has been no epidemic of disease due to it, the present water supply has been found to be contaminated with sewage.

STREET LIGHTING AND ELECTRIC POWER**Companies May Have Complaints Adjudicated**

Albany, N. Y.—Assemblyman Hammond has introduced a bill amending the Public Utilities law, so as to remove an objection raised in a recent decision of the Court of Appeals. According to the bill, the same right will be given to gas and electric companies to enter complaints regarding unfairness of prices, purity and quality, as is given to the people.

City Control of Wire Poles

Baltimore, Md.—A bill has been prepared by the Electrical Subway Commission for passage by the State Legislature to give the city control over the telegraph, telephone and lighting poles in the city, with the right to substitute at certain points permanent concrete poles of attractive design, and located in alleys. The object of the bill is broad. Besides the advantage afforded by the substitution of concrete poles in alleys for the unsightly wooden shafts in the streets, the bill will result in the reduction of the number of poles now standing.

Mayor Cancels Lighting Contract

Boston, Mass.—Mayor George A. Hibbard has cancelled the city's contract with the Edison Electric Illuminating Company for the lighting of the public buildings of Boston. The Mayor takes this action in accordance with the recommendation of the

Finance Commission, on the ground that the city has been paying extortionate rates. The contract had a year to run. The Mayor proposes that the ward rooms shall be lighted by gas, and that a plant be established by the city in the basement of City Hall which shall supply electric lighting to City Hall, the old Court House and Police Station No. 2.

Vetoed Lighting Plans

Eau Claire, Wis.—Mayor Frawley has vetoed two lighting ordinances. The offer of the Welsbach Street Lighting Company was vetoed because lights can only be put in where there are gas mains, and it is doubtful whether a foreign corporation can make a contract under the new law with a Wisconsin municipality. The proposition for electric lights was vetoed on the ground that the city should wait until the State Railroad Commission had adjusted local rates.

Leases Municipal Conduits

Geneva, N. Y.—A contract has been signed by Mayor A. P. Rose in behalf of the city and the Economic Power and Construction Company by the terms of which the company rents ten ducts in the city conduit system for a term of twenty years at an annual rental of five cents per duct foot. The contract calls for 5,515 feet, and the amount may be increased. The company further agrees to use any further conduits the city may build and to conform to any reasonable regulations adopted by the Board of Public Works.

Company Is Sustained

Madison, Wis.—Prof. A. C. Humphrey, of Morristown, N. J., President of Stevens Institute of Technology, and one of the Trustees of the Carnegie Educational Fund, testified before the State Railroad Commission that he considered the value of the Madison Gas and Electric Company as a going concern to be \$310,000. According to this estimate, the total value of the company's property, tangible and intangible, is about \$1,250,000, which is the figure contended for by the company.

Municipal Plant for Two Cities

Oakland, Cal.—The movement for a municipal electric lighting system for Oakland and Berkeley has progressed so far that a committee of Council has been appointed to confer with the Trustees of Berkeley about the matter. The rate of \$72 per arc light, now paid Oakland, is considered as out of all reason as compared with the prices paid by other cities.

Mayor Advocates Municipal Gas Plant

Port Huron, Mich.—Mayor John J. Bell has addressed a communication to the electors of the city regarding the proposition to establish a municipal gas plant, a question to be decided at an election in April. He reviews the history of the local gas company, shows the small cost of their plant in the beginning, and its high capitalization of the company now, the difference presumably representing profits or increase in value due to growth of the business. The success of the municipal gas plant in Duluth is reviewed. Attention is called to results of an investigation into the cost of gas in Saginaw, where the average cost of the manufacture and distribution was found to be about 50 cents per 1,000 cubic feet. In conclusion, the electors are requested to read carefully the reports that have been made.

Gas and Electric Street Lighting Compared

Salt Lake, Utah.—Members of Council visited an exhibit of the Welsbach gas street lighting system installed by the Utah Gas and Coke Company on Second South street, where seven incandescent street lamps had been placed. The Councilmen were much pleased, and the illumination was considered much better than electric arc light service. Several months ago an offer was made by the Welsbach Company to supply these lights for \$28 per annum. A committee was sent East to investigate. In the meantime, however, the Utah Light and Railway Company reduced the price of their lamps from \$72 to \$60 a year, and agreed to furnish an improved lamp. It was finally agreed to let both companies make an exhibit.

FIRE AND POLICE

Fire Chief Loses Auto

Boston, Mass.—The big red auto which for the past year has carried Chief Mullen to fires in the city has felt the effects of the "economy" regime. By order of Commissioner Parker, the use of the Chief's machine will hereafter be limited to fires in the suburbs and "special occasions." The Commissioner states that he favors extending the use of automobiles in the Department, but that economy for the present is imperative.

Accounting in Fire Department Commended.

Bridgeport, Conn.—Mayor Henry Lee is favorably impressed with the system of keeping records in the Fire Department, and has a plan to have it adopted by the Charities Department. The Fire Department has a triplicate bill system, typewritten records using indelible-inked ribbons and specially made books. It is possible to tell at a glance where every penny of the appropriation has been spent.

New Pumping Station for Fire Fighting

Buffalo, N. Y.—Buffalo is contemplating further improvements in its present fire fighting facilities, and one of the additions to the equipment will be the installation of an electric pump or pumping station at the mouth of the Washington street pipe line. Heretofore the city had stationed a fire tug at the mouth of the line, and used it for pumping water.

Fire Marshals Oppose Parlor Matches

Columbus, O.—At the recent meeting of Fire Marshals it was determined to make an effort to outlaw all but safety matches. This will be attempted through similar legislation in different States. The insurance authorities contend that many destructive fires and much loss of life result from the use of the parlor matches. It is claimed that to outlaw all but the safety matches will not affect the business of the factories, for most of these can make the safety matches with the same machinery as that used for the manufacture of the parlor matches.

To Protect Fire Hydrants

New York, N. Y.—At the request of Fire Chief Croker, Foster Crowell, Commissioner of Street Cleaning, has issued an order directing that in the future fire hydrants shall be turned on only by foremen or assistant foremen of the Department, when the water is to be used for flushing the streets. The order also requires that when the street cleaning squads are using the hydrants, they pump all standing water out of the hydrants before putting the caps on. Sweepers and drivers are forbidden to touch the hydrants without permission or direction of the gang foreman.

Pay of Firemen Increased

Salem, Mass.—The Common Council has voted to raise the pay of permanent firemen from \$900 to \$1,000, and Arthur B. Jones has been re-elected as Engineer of the Fire Department for two years.

New Fire Drill Plan

Youngstown, O.—Fire Chief W. H. Loller has recommended to the Board of Education a plan for emptying school buildings of their children. The scheme is to have a door leading from each room on the second or third floors directly onto the fire escape. In rehearsing a fire drill and in dismissing the children each day for recess they should be taught to march onto the escape and thence to the ground. The object is to prevent congestion on the first floor, which is the usual cause of accident in schoolhouse fires.

Fireproofing of School Buildings

Washington, D. C.—In a letter to Representative Washington Gardner, Chairman of the Subcommittee of the House Committee on Appropriations, the District Commissioners ask that provision be made in the estimates for new school buildings for fireproofing them. Fireproofing would necessitate an increased appropriation in the case of each school.

Police Salaries in Pennsylvania Cities

Wilkes-Barre, Pa.—In refusing to appropriate money for increased salaries for the police, the Finance Committee has prepared a statement of salaries paid in other Pennsylvania cities. They are as follows: Chester, \$60 a month; Easton, \$60; Reading, \$65; York, \$60; Williamsport, \$60. In Scranton, a second-class city, where liquor licenses bring in the sum of \$240,000, salaries are larger; Wilkes-Barre, a third-class city, receives but \$55,200. Scranton has only 65 patrolmen for 19 square miles of territory, whereas Wilkes-Barre has 54 patrolmen for 4.8 miles. Harrisburg pays \$75 a month, and has 40 men for 7 square miles. In Wilkes-Barre, 20 men receive \$65, and 34 men \$75 a month.

GOVERNMENT AND FINANCE

Governor Makes Birthplace a City

Albany, N. Y.—Governor Hughes has signed the Waddell bill, creating Glens Falls a city of the third class. Glens Falls was the birthplace of the Governor, and has been the largest village in the State to the present time.

Commission Government in New State

Ardmore, Okla.—The committee of twenty-five appointed to investigate the advisability of adopting a new municipal charter have made their report, recommending a commission form of government.

Franchise Taxes Not for Cities

Boston, Mass.—In a report to the Legislature, the Commission on Taxation, under the head of distribution of the franchise taxes paid by domestic corporations, says that in their opinion no part of the franchise tax paid by railroad, telephone and telegraph companies should be distributed to the cities and towns where stockholders happen to reside and it is advised that all the tax be retained by the Commonwealth. This is in effect a distribution among all municipalities in proportion to valuation. The total State tax is \$4,000,000 and the corporation tax distributed is \$3,724,526. The towns most unfavorably affected would be the rich suburban towns, such as Brookline, Manchester, Milton, Beverly, Newton, Southboro, Webster, Weston and Dalton.

New Code Bill in Ohio

Columbus, O.—After a hard fight, the Paine municipal code bill was passed by the House of Representatives by a vote of 67 to 39. The bill gives the Mayors complete control over city governments.

Commission Government in Montclair

Montclair, N. J.—At a dinner held at the Club Hall, Montclair, under the auspices of the Civics Association to discuss the advisability of a Commission form of government for Montclair, a resolution was passed to appoint a committee of fifteen to study the needs of the future government for the town and report its conclusions. In 1893, with a population of 10,000, the government was changed from that of a township to a town. Now that the population has reached 20,000, the general sentiment appears to be that some further change is desirable.

Charter Changes Go Into Effect

Syracuse, N. Y.—A number of changes in city affairs, brought about by the revision of the charter for cities of the second class, has become effective not only in Syracuse but in Albany, Troy, Utica, Schenectady and Yonkers. One of the chief changes is the granting of more power to the President of the Common Council when he is Acting Mayor. If the Mayor is absent nine days, the Acting Mayor may approve or disapprove any ordinance or resolution of the Common Council. The power of appointment or removal cannot be exercised until after a thirty-days absence. Hereafter a quarterly report of the financial condition of the city must be made by the Comptroller. The Board of Contract and Supply may purchase work or materials amounting to less than \$250 without advertisement.

Suggestions for Better Auditing

New York, N. Y.—Comptroller Metz has made public the results of investigations conducted by the Bureau of Municipal Research on the financial methods of the city and the ways in which they might be improved. One of the principal subjects for criticism is the absence of daily records of men employed by the city and detailed statements of what they were doing. The lack of these makes padded payrolls possible. Payrolls have been charged up to city debt without any record as to whether the expense was for permanent improvement. There is lack of harmony in the Accounting Department. Subordinate bureaus may retain claims against the city and hold them up for purposes of profit without the responsible central authority even knowing that the claims exist. The system in the Bureau of Revenue does not show whether the amounts returned were those collected, or whether they were the amounts that ought to have been collected.

Officials Must Not Be Interested in Contracts

Richmond, Va.—According to a bill just passed, members of City Councils or Boards or Commissioners elected by Councils or appointed by Mayors or heads of departments cannot hold any contract with the city or be interested, either directly or indirectly, in any contract with the city which employs or pays them.

REFUSE COLLECTION AND DISPOSAL

Garbage Plant a Desirable Neighbor

Annapolis, Md.—Street Cleaning Commissioner J. L. Wickes, of Baltimore, who appeared before the Legislature to protest against a bill preventing the Baltimore garbage plant from being located within nine miles of the city, presented a petition signed by the property owners of Humphries Creek requesting the location of the plant there. The garbage, after it is reduced, makes fertilizer that the farmers want.

Snow Fences Pay Well

Bangor, Me.—Street Commissioner F. C. Brackett, in his annual report, says that three snow fences were erected last fall in exposed places where the snow formerly drifted badly, as an experiment, and they have proved to be a decided success, saving many times their cost. They are inexpensive, are built in sections so they can be taken down in the spring and stored away until another winter.

Alderman Would Operate Crematory

Lexington, Ky.—Alderman W. R. Cockerill is so confident that the city can save money by having the garbage cremator run by private contract that he has offered to resign his office and undertake the work himself. A committee will look into the cost of running the cremator and refer the entire matter to the Mayor.

Car Company Will Sprinkle Streets Gratis

Louisville, Ky.—The Board of Public Works, in arranging for street sprinkling for the coming season, will carry out some of the ideas formulated by the late Mayor Paul C. Barth. Sprinkling of streets having car tracks will be done by car sprinklers under an arrangement with the company, by which the city will supply water and the company perform the work. The Board will arrange for the sprinkling of other streets.

Unsatisfactory Garbage Collections

Newark, N. J.—The new regulations appointing a definite time of day for the collection of garbage and requiring that waste cans of all sorts be placed near the stoop line have proved unsatisfactory to a great number of householders. The authorities, however, are still of the opinion that as people get more accustomed to the rules they will like the change. It is claimed by the dissatisfied that more litter is created than when boxes and cans were taken from the curb; that the sod is injured by the tramping of the contractor's men; that where the hours for collec-

tion are late in the day, either the women of the home must put out the packages, or, if this is done by men in the morning, the streets look bad. A year ago a committee of the Board of Trade advised that this work should be done at night, and many people favor this plan.

PARKS AND CITY BEAUTY

Reconstructing Famous Boardwalk

Atlantic City, N. J.—The beginning of the construction of the new steel and concrete section of the Boardwalk marks an epoch in the history of Atlantic City. It is the real beginning of the "City Beautiful" plans intended ultimately to make the city one of the most attractive in the world. The expenditure of \$20,000,000 is contemplated. The inlet will be deepened to twenty feet so that the largest pleasure craft and coasting vessels may enter.

Chickasha After a Boulevard

Chickasha, Okla.—A seven-mile boulevard lined with trees and kept in the best possible condition encircling the town, is one of the things proposed by the Park and Boulevard Committee of the Commercial Club. Sites for two or three parks along the boulevard have already been offered to the city. Mayor Bridges, who is a member of the Country Club, favors the exchange of some land belonging to that organization for a site along the boulevard where a fair ground and race track would be laid out.

Beautification at Ohio Capital

Columbus, O.—That citizens of Columbus are interested in the city beautification, as outlined by the Columbus Plan Commission, was evidenced by the large attendance at a lecture given in the Board of Trade auditorium by Austin W. Lord, of New York City, and Albert Kelsey, of Philadelphia, Pa. The appointment of a commission was urged, whose members should have a long term of office, so that they could work out definite plans to be executed from time to time. The necessity of radial streets in place of the old-fashioned cross-roads idea was explained and it was suggested that the plans would be best carried out by beginning at the center of the city.

City Beauty at Outsiders' Expense

Louisville, Ky.—W. W. Hite, President of the Board of Trade, has announced that the organization has a plan about completed for the expenditure of \$5,000,000 on making Louisville a "City Beautiful." The project, he says, has been worked out along lines which call for no extra assessments on the part of the taxpayers of the city, the improvements being paid for by outside parties. The principal feature of the plan is understood to be the elevation of all railroad tracks in the western part of the city. A park opposite the Tenth street station is a part of the design.

RAPID TRANSIT

Street Railroad Complains of Taxation

Baltimore, Md.—A bulletin of the United Railways and Electric Company, after showing how heavy the taxes on street railways are in the city, as compared with other large cities, gives in detail the various taxes and charges in the nature of taxes it has to pay, which amounted in all to about 10 per cent. of its gross receipts in 1907. It claims that the reasonable way to look at the question is from the standpoint that the interest of the people and that of the company are mutual, and that the effects of any excessive taxation would be felt primarily by the public.

Shuttle Train for Brooklyn Bridge

Brooklyn, N. Y.—One of the witnesses heard at the investigation by the Public Service Commission of train service on the Brooklyn Bridge was Bird S. Coler, Borough President of Brooklyn. Mr. Coler asserted that the through train service recently inaugurated had turned out to be a failure, and advocated a return to the old shuttle car system, with the installation at the Manhattan terminal of the plan of stub and switches.

Would Increase Subway Service

New York, N. Y.—In a report on improving the service in the subway, Bion J. Arnold, Consulting Engineer to the Public Service Commission, asserts that the capacity of the line can be increased 50 per cent. by double decking the stations so that both present tracks can be used for express trains to run alternately first on one side of the platform and then on the other. Local trains would use the other deck of the station. By improvements in the signal system, Mr. Arnold says the headway of trains can be reduced to ninety seconds, the present headway averaging over two minutes.

Philadelphia Subway Near Completion

Philadelphia, Pa.—Assurances were given at an informal inspection of excavations of the Market street subway that the road would be turned over to the company not later than September. During the recent financial stringency, when construction work was delayed in many places, the operations on Market street were not checked.

MISCELLANEOUS

New City Hall for Chicago

Chicago, Ill.—Definite steps towards the building of a new City Hall seem to be indicated in the advertisements in the daily papers by the Commissioner of Public Works for the temporary housing of the Departments to begin July 1, 1908. The new City Hall, when completed, will, with the Court House, completely fill the block bounded by Dearborn, Randolph, La Salle and Washington streets.

Dance Hall Regulations

Minneapolis, Minn.—As a result of a crusade against the dance halls, an ordinance has been introduced in the City Council to regulate these establishments. A public dance is defined as a gathering held in a public hall, whether or not admission fee is charged, for the purpose of dancing. In halls where public dances are given, it is to be unlawful to sell or give away liquor. Moreover, a public dance may not be held in a building in which is located a saloon or near which there is a public drinking place. If, for any reason, it is necessary to give a dance in a building where there is a saloon, the saloon must be closed during the dance. No dance is to be conducted later than 1 o'clock and all minors are excluded.

House Numbering Difficulty Overcome

Schenectady, N. Y.—An amendment was adopted to the ordinance for the numbering of houses. At present the Philadelphia block system is used, which provides that each new hundred shall start with each new block. Much trouble has been encountered from the fact that some of the intersecting streets, which mark off the blocks, do not extend through the street which is being numbered. According to the amendment, the new series of numbers, starting with the next hundred, will begin on both sides of the street, whether the intersecting street extends through or not.

Defects in Public Buildings

Schenectady, N. Y.—Fire Chief Yates and Marshal Brownell have made an inspection of all public buildings in the city. The Superintendent of Schools has reported that there were 180 doors in the public schools swinging inward. They are being changed in most cases by substituting swing doors.

Pingree Potato Patch Idea Revived

Springfield, O.—Mayor W. R. Burnett has appointed a committee to arrange a plan of offering vacant lots about the city to the shopmen and worthy citizens who would like to cultivate them and raise vegetables.

LEGAL NEWS

A Summary and Notes of Recent Decisions—Rulings of Municipal Interest

DAMAGES TO LAND DUE TO SEWER

Richardson vs. City of Centerville.—An owner whose land is taken under the power of eminent domain may recover for depreciation in the value of the remainder of his land due to the proximity of the improvement for which the land is taken, but he cannot recover damages for the improper construction of the improvement. Evidence that the sewage was discharged into a natural water course which was dry at the point of outlet during a considerable part of each season, and proofs of the number of users of the sewer at the time of the trial and the probable increase thereof in the future and of the character of the sewer connections, were competent on the issue of depreciation in the value of the remainder of the land.—Supreme Court of Iowa.

PUBLIC WATER SUPPLY—PRIVATE FRANCHISE

Brummitt et al. vs. Ogden Water Works Co.—Constitution provides that no municipal corporation shall directly or indirectly lease any water rights or sources of water supply controlled by it, but all such rights, etc., shall be preserved, maintained and operated by it for supplying its inhabitants with water at reasonable charges; provided that nothing herein contained shall be construed to prevent an exchange of water rights or sources of water supply for others of equal value, and to be devoted in like manner to the public supply of its inhabitants. Prior to the time the Constitution went into effect a city had made a contract purporting to lease certain water rights to one who agreed to construct and operate a system of water works to supply the city, etc., under which the lessee was to furnish certain free water to the city. After the Constitution was adopted the city passed an ordinance regulating its relations with the company which succeeded to the rights of the lessee in which some changes in rates, etc., were made, and this ordinance granted to the company the use of the water rights for a term of fifty years as a part of the arrangement; but the city was still to receive considerable water for public purposes free of charge. Held, that the ordinance was in effect a mere continuance of the former contract, and the disposition of the city's water right was valid. Where an ordinance regulating relations with a water company and granting the company a right to use the streets, etc., fixes the rates for the entire period of the contract, that provision cannot be upheld, but the City Council may fix temporary rates. Both the city and its taxpayers may sue to enforce reasonable rates, and the water company may sue to prevent the enforcement of confiscatory rates. Hence the entire ordinance is not vitiated by an agreement of the council that a certain rate for hydrants should be maintained during the fifty-year period covered by the ordinance.—Supreme Court of Utah.

INJURY TO PEDESTRIAN—CELLARWAY

Davis vs. Town of Bonaparte.—The owner of a building is not liable for injury to a pedestrian who, while walking along the side thereof on a dark night, fell into a cellarway, the cover of which had been left open by another, whether the land on which the cellarway was located was a part of a street or not, since the cellarway itself was not a public nuisance.—Supreme Court of Iowa.

MUNICIPAL EMPLOYMENT—VETERANS

Robertson vs. Alberson, Mayor, et al.—Under the statute giving veterans a preference right to appointment to municipal positions over other persons of equal qualifications, courts will not control a City Council's determination that a veteran was not equally qualified with an appointee when the Council's good faith is not impeached, and it appears that it was well advised as to the qualifications of the respective candidates.—Supreme Court of Iowa.

PUBLIC IMPROVEMENTS—ESTIMATES

Gage et al. vs. City of Chicago.—Under Local Improvement Act a new assessment made before an improvement being based upon an estimate of probable cost, the proceedings must be the same as in case of a first assessment. Under Local Improvement Act a new assessment for completed work need not be accompanied by an estimate of probable cost, nor any recommendation of the board of local improvements.—Supreme Court of Illinois.

CONTRACTS—PARTIAL ESTIMATES

Devlin vs. City of New York.—A contract for city improvements provided that plaintiff should receive payment for 85 per cent. of material and work furnished from time to time on certificates of the City Engineer, to be made by measurement or estimation, that it amounted to \$7,000 or more for the period, and that no payment should be made until the certificate of the Engineer that the payment was due had been presented, etc., and that the action of the Engineer, evidenced by his final certificate, should be that by which the contractor was to be bound; all prior certificates being estimates, subject to correction by the final certificate. Held, that the progress estimates were not required to be made by strict measurement, and that a certificate that the work amounted for the period to \$7,000 was a condition precedent to the recovery of progress payments, in the absence of an allegation and proof that the engineer fraudulently, arbitrarily or unreasonably refused the certificate when plaintiff was entitled to it. If plaintiff proved that the engineer fraudulently, arbitrarily or unreasonably refused to give a certificate when the contractor was entitled to it, he could recover, even in case of the final certificate; but it would be necessary to both plead and prove those facts. Whether a City Engineer fraudulently, arbitrarily and unreasonably refused to give a certificate of progress that a certain amount of work had been done in a certain period under a contract for city improvements held a question for the jury. In an action for breach of contract, the burden of proving the breach is on plaintiff.—New York Supreme Court, Appellate Term.

REMOVAL OF EMPLOYEE

O'Brien vs. City of New York.—Where the Deputy Tenement House Commissioner wrote a letter to the Chief Inspector, directing that plaintiff be suspended as tenement house inspector pending investigation, the letter being countersigned by the Tenement House Inspector: "O. K. E. J. B."—his suspension was by the Commissioner, and not by the Chief Inspector.—New York Supreme Court, Appellate Term.

CHANGE OF STREET GRADE

Lawton vs. City of New Rochelle.—Plaintiff conveyed land to a village for a street, when laws applicable to incorporated villages would have authorized a proceeding by him against it for damages for a change in the grade. The grade was changed after the village was dissolved, and from its territory defendant city was created. Held, that not only did plaintiff not acquire a vested property right, in the nature of an easement in the street, to have it maintained at the grade first established, but that, even if he had, he had no vested right to have damages resulting from invasion of that right ascertained in the manner provided by the statute applicable only to villages.—New York Supreme Court, Appellate Division.

MACADAM NOT A PERMANENT IMPROVEMENT

McMillan vs. Fond du Lac County et al.—Charter of Fond du Lac declares that the cost of paving, macadamizing or grading a street shall be assessed on abutting lots, but that property shall not be assessed for a second or subsequent improvement, provided that, in the case of graveling a street, the original improvement must have consisted of placing thereon "at least one foot in depth by sixteen feet in width of gravel to entitle such improvement to be a permanent one." A street was graded, so that the center was 2 1-2 feet higher than the gutters, and after the street, as so graded, had been rolled, a strip of crushed stone 10 feet wide and 8 inches deep was laid along the center, over which was placed a course of gravel. The portion of the street outside the strip was graded up to the level of the crushed stone and rolled. Held, that the improvement was not a permanent one within the charter, and hence abutting lots were liable to assessment for a subsequent improvement.—Supreme Court of Wisconsin.

INJURY FROM ELECTRIC WIRE

Mickey vs. City of Indianola.—In an action against a city for injuries to a traveler caught by electric light wires strung over a street while a street lamp was allowed to remain down after having been prepared for future use, the questions of negligence and contributory negligence held for the jury. A city, through its servant, has no right to leave a dangerous obstruction in the street for the sole convenience of such servant, and without any necessity therefor, so far as his work at that particular point is concerned.—Supreme Court of Iowa.

REMOVAL OF LATERAL SUPPORT

Village of Haverstraw vs. Eckerson et al.—Under the Constitution, providing that all corporations shall have the right to sue in all courts in like cases as natural persons, and General Corporation Law, Laws of 1892, declaring that a municipal corporation includes a village, a village has the same right to sue that a private corporation or individual has. At common law, the owner of lands on which there are no buildings or other superstructures is entitled to lateral support from the lands of his neighbor. Under the Laws of 1897, providing that the streets of a village are under the exclusive control and supervision of the Board of Trustees, a village is charged with the duty of maintaining its streets in a reasonably safe condition, and where an adjoining landowner proposes to excavate his own land so near the boundary line of a street as to remove the lateral support thereof so that it is likely to destroy the highway, the village may sue to enjoin him from proceeding with the excavation. There is no presumption that lands used for streets have had any additional burden imposed upon them, and an adjoining owner has no right to excavate his premises so as to destroy the lateral support of a street.—New York Supreme Court, Appellate Division.

FIREWORKS—NUISANCE

Melker vs. City of New York.—The primary meaning of "nuisance" is "that which injures." If the natural tendency of the act complained of is to create danger and inflict injury upon person or property, it may properly be found a nuisance as a matter of fact; but, if the act in its inherent nature is so hazardous as to make the danger extreme and serious injury so probable as to be almost a certainty, it should be held a nuisance as a matter of law. The exhibition of fireworks, allowed to be given in a public street where a large number of people are assembling, is not a nuisance as a matter of law, and whether it is a nuisance in fact is a question for the jury.—Court of Appeals of New York.

BOARD OF EDUCATION—REMOVAL

People ex rel. Post et al. vs. Henley, State's Attorney.—A city officer undertaking to exercise a power must be able to show that it has been conferred by legislative grant. The power to remove a city officer whose term is fixed by statute for a definite period is not incidental to the power to appoint. Laws 1889, and Act April 1, 1872, which it repealed, cover the entire subject of free schools, provide the mayor in cities of more than 100,000 inhabitants shall appoint the members of the Board of Education, and give no authority to remove them. The cities and villages act provides a uniform system for municipal government, and does not refer to schools or school officers. It provides that the Mayor shall appoint all city officers, and authorizes him to remove any officer appointed by him when he deems the city interests to require it. Held, that the Mayor has no authority to remove members of the Board of Education in such cities, the power of removal conferred by the cities and villages act being confined to officers appointed under that act. Laws 1895, authorizing the Mayor to appoint and remove Civil Service Commissioners, and Laws 1871-72, authorizing him to appoint and remove public library directors indicate that the cities and villages act was not intended to apply to officers appointed under other acts.—Supreme Court of Illinois.

IRREGULAR CONTRACT NOT ULTRA VIRES

Rogers vs. City of Omaha.—Where a municipal corporation enters into a contract which, under the existing law, it was authorized to make, but where the procedure laid down by the statute was not followed, the contract is not ultra vires, but irregular, and the contractor or his assignee may maintain an action to recover a balance due upon such contract. A warrant, issued by the proper authorities of the city in consideration of a valid indebtedness against it, is a written acknowledgment of such indebtedness and a promise to pay, and arrests the running of the statute of limitations.—Supreme Court of Nebraska.

DAMAGES—FIREWORKS

De Agramonte vs. City of Mt. Vernon.—In an action for injuries to a pedestrian walking along a public park by being struck by a portion of a bomb discharged in a public park as a part of a display of fireworks under a license issued by the Mayor, evidence held to require submission to the jury of the question whether the spot where the fireworks were exploded was so close to the street as to make the exhibition dangerous to persons thereon.—New York Supreme Court, Appellate Division.

VACANCY—HOW FILLED

Palmer et al. vs. Stublely et al.—A vacancy in a city office cannot be anticipated, and filled by appointment before it exists, in the absence of express authority. The Port Jervis City Charter provides that the first election of officers under the charter shall be held with the general election in November, 1907, and that the term of office of the officers chosen shall commence with the beginning of 1908, and that no vacancy shall be held to exist in any of the city or ward offices prior to January 1, 1908, by reason of the failure of the charter to provide for the occupancy of the offices to such date. Section 20 provides that if a vacancy shall occur in any elective office of the city, except as otherwise provided in the act, the Common Council shall appoint a person to fill such vacancy for the balance of the unexpired term. Held, that the death of a supervisor-elect prior to January 1, 1908, did not create a vacancy, and a Common Council whose life ended on December 31, 1907, had no power, prior to that date, to appoint his successor. The phrase, "for the balance of the unexpired term," in Section 20, Laws 1907, indicates the Legislature's intention that at the time of filling a vacancy some part of the term must have expired.—New York Supreme Court, Special Term.

REJECTION OF BID

Brown vs. City of New York.—When the terms of sale of a lease by a city authorized a rejection of any bid, a bid could not be rejected after its acceptance and the receipt by the city of money thereunder.—New York Supreme Court.

UNLAWFUL REMOVAL OF POLICEMAN

People ex rel. Connolly vs. Bingham, Police Com'r.—Regulator, a police officer, having been charged with neglect of duty in being absent from roll call, and served with copies of the charges and notice to appear, did not appear on the date of the hearing, and another charge was preferred against him for his failure to appear and answer. When he did appear he pleaded "not guilty" to the last charge, and the hearing was subsequently continued in private by conversation with the commissioner. No witnesses were sworn or evidence taken at either of the dates fixed for hearing, and the only evidence before the commissioner of the service of the charges was an oral statement by a police sergeant that service was made. Held, that there was no legal proof that plaintiff was served with notice of the charges, and his dismissal on the first two charges was without adequate trial and unlawful.—New York Supreme Court, Appellate Division.

RAILROAD TRESTLE OVER STREET

Delaware, L. & W. R. Co. vs. City of Syracuse.—Under the New York railroad law a railroad company is not authorized to build a trestle over a public highway in a city, to be occupied by tracks for the purpose of obtaining access to coal pockets, without the consent of the city, although it would not interfere with the use of the street; and in a city of the second class, where the power to regulate the use of streets by railroads is vested in the Common Council, such consent can only be given by the Council. Nor is the construction of such a trestle authorized by a resolution passed by the Council granting permission to the company generally to construct and operate "switch or switches, track or tracks," across the street, but which makes no reference to a trestle.—U. S. Circuit Court, N. D., New York.

LICENSE FOR NATURAL GAS MAINS

Kittanning Borough vs. Consolidated Natural Gas Co.—A borough has the right to levy an annual and mileage license tax on the pipes of a natural gas company maintained within the streets of the borough.—Supreme Court of Pennsylvania.

CONTRACT WITH FORMER TRUSTEE

Harmison et al. vs. Town of Prestonsburg et al.—A contract for the construction of sidewalks is not invalid because the contractor was a town trustee until resigning just before bidding, though he was reappointed several months afterward; there being nothing to show he did not resign in good faith.—Court of Appeals of Kentucky.

OBSTRUCTION OF SEWER—LIABILITY

Googin vs. City of Lewiston.—When the municipal authorities in the process of repairing a public sewer stop up the pipe of one who has lawfully connected with it so that it fills and bursts, the municipality is liable for the damage occasioned thereby.—Supreme Judicial Court of Maine.

MUNICIPAL APPLIANCES

Texaco Filler

THE subject of fillers for the joints between the bricks in street pavements is one of increasing interest because it is found that the filling material has no small influence on the quality and durability of the roadway. The "Texaco Filler" is a bitumen, practically pure, which has the special feature of merit of being peculiarly insensitive to changes of temperature so far as they affect its viscosity. Its melting point is stated to be 220° and its chilling point below zero. By virtue of this property, the filler will remain in the joints without the use of pebbles or sand; as the filler stays in the joints the edges of the brick are protected from chipping and the life of the pavement is increased. Its adhesive properties give it an excellent hold on the bricks. The elastic qualities of Texaco filler are such that vibration is absorbed and noise deadened. As regards volatility when heated, the commonly accepted test for the life of a bitumen, the loss is a fraction of 1 per cent. when the material is maintained at a temperature of 350 degrees F. for six hours—a test that no ordinary asphalt cement will stand, much less coal-tar pitch. Another indication of its durability is the oxidation test. When air is blown through a sample of Texaco at a temperature of 300° F. for six hours the loss in weight is a mere fraction. Coal-tar pitch subjected to the same test sometimes loses as much as 25 per cent. After tests like these "Texaco" retains its viscous nature while coal-tar pitch becomes a brittle solid. It weighs 7 1-2 to 8 pounds to the gallon, as compared with 10 to 12 pounds for coal-tar and other materials used for the same purpose. As to the quantity required, a ton is equal to 240 or 250 gallons. For pouring one square yard of brick pavement 1 1-8 to 1 1-4 gallons are generally necessary. This material is manufactured by The Texas Company, 17 Battery Place, New York City.

The Arrow Can

THE Arrow Can Company, 35 Warren street, New York City, manufactures a can for waste of any description, for which they claim merits that put the can in a class practically by itself. The two characteristic features of the manufacture are the system of reinforcement and the method of galvanizing. The reinforcement consists of vertical 1/2-inch steel rods, which are not merely attached to the can, but are actually folded in flutes of the sheet steel as it is pressed into the form. To do all this requires special machinery, which has been devised by the company for its work. Besides the vertical lateral supports, there is a top ring, consisting of a solid piece of sheet steel, 16-gauge, with double flanges, which crimp over the edge of the body, giving, besides protection, a round edge, to facilitate handling. The bottom, also of 16-gauge steel, has an outside and inside flange, all of one piece. The other peculiarity in the manufacture is that the can is galvanized heavily, inside and out, after it is assembled. This prevents rust and corrosion that would occur where the galvanizing metal might be chipped off in constructing the can of separate galvanized parts. Malleable iron drop handles with heavy clips are provided, for ease in handling.

Street Signs

THE Clyde street sign consists of enamel over a sheet of metal which is guaranteed not to rust. The letters, which are three inches high, more or less as desired, are white and stand out in bold relief on a background of jet black enamel. The letters are on both sides of the sign and each is riveted on separately. An adjustment ratchet allows the sign to be set in any direction. The stand consists of an iron pipe buried in a solid anchorage of cement. The brackets which are to be attached to the buildings and telephone poles are on quarter-inch bar iron and each is heavily braced to prevent collapse in case a lineman should climb up the pole and step upon them. These signs are made by the American Sign Company, Clyde, O.

Hannagan Catch Basin

THE catch basin shown in the accompanying illustration is manufactured by the Hannagan Catch Basin Company, Lawrence, Mass. It is especially recommended as an aid in the suppression of the mosquito pest, although it has excellent features not pertaining to that line of sanitary work. The inlet is on the plane of the roadway in which it is placed. Water enters through openings in the cover and in the framework next to the curb. The openings are large and so shaped that they do not clog with leaves. The cover, *E*, and frame, *G*, ordinarily weigh 450 pounds, but may be made lighter or heavier. The area of water way in the cover is 208 inches and 113 inches between the cover frame and the curbing. Another good feature is the valve *D* and plug which lead to the sewer inlet for purposes of cleaning. The plug is of cement of peculiar shape. When coated with tallow it will not freeze in the socket and can be removed easily at any season of the year. The cement bar which carries the brick partition trap and the cement valve is reinforced with iron. In the illustration the chain which attaches the valve to the top of the cover frame is not shown, as the plug has been removed and a funnel inserted in the emergency channel *O* to pump the water out preparatory to cleaning. The cement bar, *F*, makes it possible to make the trap so deep that, however great the flow of water, no sand will reach the outlet. It is this also which makes the basin retain the kerosene oil placed there to kill mosquito larvæ under all circumstances. The wall built on the bar keeps the outlet from freezing in winter. Water in falling from the inlet passes down at the front of the trap wall around and under the cement bar, as shown by the arrows. The transverse white line crossing the inside of the basin shows the water line. To show how roomy and capacious the space behind the trap wall is, a man is standing there. He may stand there when cleaning the basin in order to avoid droppings from an ascending bucket.



NEWS OF THE SOCIETIES

Washington Society of Engineers.—At a meeting of the Society at Hubbard Memorial Hall, March 17, Calvin W. Hendrick, Chief Engineer of the Baltimore Sewerage Commission, discussed the sewage disposal problem in general and particularly the system now being installed in Baltimore. He said that the time is not far distant when the United States Government will have to take hold of the disposition of the sewage of the various cities by framing and imposing certain laws governing the disposal of sewage, both as to methods and conditions. As rivers flow from one State to another, it is really, he said, an interstate matter. Regarding the Baltimore system, he said that two separate systems will be constructed, one for storm water and one for sanitary sewage. The sanitary system calls for 850 miles of sewers and house connections, costing approximately \$14,000,000. The storm water system requires about 183 miles of drains, costing about \$4,500,000. The work will be completed, it is expected, in 1914. The lecture was illustrated with many lantern slides. Before Mr. Hendrick's address Mr. Carl Gregory, photographer of the United States Geological Survey, exhibited several slides showing color photography.

City Solicitors of Ohio.—At a meeting at Columbus, O., March 2-3, the Solicitors discussed a number of bills pending before the Legislature. One of the bills which the association favors gives cities the right to construct tunnels through any or all the streets of the city. All water and electric companies would be compelled to run their pipes and wires through the tunnels. Another bill is to the effect that city ordinances be published in only one newspaper in a city, and that the contract for advertising be given out yearly and awarded to the lowest bidder. Instead of issuing bonds to cover indebtedness incurred for improvements, a bill is pending to allow municipalities to issue notes on certificates of indebtedness, to run for a period not exceeding six years. Some improvements and economies in serving and publishing improvement notices have also been incorporated in bills.

Indiana State Board of Health.—Plans for a general conference, June 24-25, in Indianapolis, to discuss the water supply of the State, were formed at a recent meeting of the State Board of Health. The purpose is to study the source of the public and private water supplies and their preservation and purification, and all citizens of the State interested in the subject will be invited. "The idea of the State Board of Health," said Dr. J. N. Hurty, Secretary of the Board, "is to forestall the day, which will come if present conditions are allowed to go on, when typhoid and dysentery will be epidemic. Such epidemics are bound to appear, if present conditions continue, and they will cost the State fearfully in money and in lives unless the pollution of streams is stopped. The conservation of water supplies is a matter of momentous importance. We speak about Indianapolis and 500,000 inhabitants. Where is the water supply for the 500,000 inhabitants to come from? Not from the ground for that supply is already exhausted. The only source is the surface supply. If we continue our present methods this surface supply will be polluted beyond economic purification."

Toledo Society of Engineers.—The members of the Society are giving considerable attention to the proposed canal between Toledo and Chicago, via Fort Wayne, and promise something interesting for the near future. Members are not only investigating the feasibility of the project, but a committee is in correspondence with officials of the association back of it, with a view of having one of them visit Toledo and read a paper on the subject. It is possible that the paper will be illustrated by stereopticon views.

City Clerks of New York State.—City Clerk Frank L. Fonda, of Schenectady, N. Y., announces that the movement to form an association of City Clerks of New York State has met with hearty favor, and the first convention has been called to meet in Schenectady, May 14-16. Several Clerks confess the crudity of the methods of their offices and would welcome enlightenment; some complain of the brevity of the term and the uncertainty of the tenure when the appointment is made by the Mayor, and the hindrance of efficiency resulting from this fact. All practically voice an expectation of improvement from an interchange of ideas, in which the experience of one may be made to result in good to all. One very properly emphasizes the necessity of confining the association to the primary object of making its members more efficient, and of avoiding any exploitation of any political interest. The probability is very strong that the public sentiment created by the deliberations of the body will lead to many reforms in mode of appointment, tenure of office, provision of adequate force and compensation, and yet without the slightest interjection of questions of party politics.

President's Home Commission.—General George M. Sternberg, Chairman of the Commission, described the work of the Board before the Monday Evening Club in the Y. M. C. A. building, Washington, D. C. The Commission has done considerable work, he stated, and has agents gathering statistics about the housing and social condition of the poorer classes in the city. The data collected will show the number of persons occupying rooms in specific houses, connections of the houses, if any, with water and sewer mains; income of family; expense of illness. In referring to the work of two companies formed to erect model homes, he declared that they had found it impossible to build sanitary houses and rent them for less than \$3 per room, under the building regulations, which, he said, are very exacting. Little is being done in the line of building sanitary homes for workmen in Washington. Seven or eight hundred unsanitary dwellings have been destroyed. This has had the effect of overcrowding other houses and raising the rent. The possibility of building dwellings with public funds, as has been done in other municipalities, was suggested.

New Jersey Association of County Engineers.—At its annual meeting at Trenton the following officers were elected: President, J. J. Albertson, Magnolia; Secretary, Robert A. Meeker, Plainfield; Treasurer, Joshua Doughty, Somerville.

Engineers' Society of Western Pennsylvania.—At the last regular meeting Willis Whited, Assistant Engineer in the Bureau of Construction of the City of Pittsburg, presented a paper on "Retaining Walls."

Society of Chemical Industry.—A "Symposium on Disposition of Refuse in the City of New York" was held at the meeting of the society at the Chemists' Club, No. 108 West Fifty-fifth street, New York City, on the evening of March 20. The following papers were presented: "Refuse and Its Disposal," by H. deB. Parsons; "The Present Methods of Collection and Final Disposition of City Wastes by the New York Department of Street Cleaning," by Edward D. Very; "Final Disposition of Refuse in American Cities," by Rudolph Hering; "The Final Disposition of City Refuse by Mixed Refuse Destruction" and "The Final Disposition of Refuse in Great Britain," by J. T. Fetherston; "The Destruction of Waste in Public Institutions and Private Buildings," by W. F. Morse, and "The Heenan Refuse Destructor," by E. H. Foster. The attendance was one of the largest ever recorded.

Civil Engineers' Club of Cleveland.—At the twenty-eighth annual meeting, March 10, the following officers were elected: Willard B. Beahan, President; John H. Fox, Treasurer; Joseph C. Beardsley, Secretary, 1200 Schofield Building.

Wisconsin Engineering and Surveying Society.—A society with this title was organized in Oshkosh, the following being the first officers of the organization: President, Geo. H. Randall, Oshkosh; Vice-President, T. E. Halliday, Plover; Secretary-Treasurer, H. L. Sweet, Neenah; Directors, T. H. Knight, Racine; N. H. Smith, Clintonville; F. E. Turneure, Madison.

Calendar of Meetings

March 4-27.

American Society of Civil Engineers.—Regular meeting at the House of the Society, 220 West Fifty-seventh street, New York City.—Charles Warren Hunt, Secretary.

May 11-16.

American Water Works Association.—Twenty-eighth annual convention, Washington, D. C.—J. M. Diven, Secretary, 14 George street, Charleston, S. C.

May 14-16.

New York State City Clerks' Association.—First convention, Schenectady, N. Y. Frank L. Fonda, City Clerk, Schenectady, N. Y.

May 19-22.

National Electric Light Association.—Annual meeting, Chicago, Ill.—W. W. Freeman, Secretary, Engineering Societies Building, 29 West Thirty-ninth street, New York City.

June 23-26.

American Society of Civil Engineers.—Annual convention, Denver, Col.—Charles Warren Hunt, Secretary, 220 West Fifty-seventh street, New York City.

June 23-26.

American Society of Mechanical Engineers.—Annual convention, Detroit, Mich.—C. W. Rice, Secretary, 29 West 39th street, New York City.

June 23-27.

American Society for Testing Materials.—Annual meeting, Hotel Traymore, Atlantic City, N. J.—Edgar Marburg, Secretary, University of Pennsylvania, Philadelphia, Pa.

June 24-25.

Indiana State Board of Health.—General Conference, Indianapolis, Ind. Dr. J. N. Hurty, Secretary.

September.

New Jersey State Firemen's Association.—Annual meeting, Atlantic City, N. J.—William Exall, Secretary, 11 Howard street, Newark, N. J.

September 21-October 12.

National Association for the Study and Prevention of Tuberculosis.—International Congress, Washington, D. C.—Dr. Henry Barton Jacobs, Secretary, Baltimore, Md.—Dr. Joseph Walsh, Philadelphia, Pa. Special Secretary of the Committee on the International Congress.

October 20-23.

American Society of Municipal Improvements.—Fifteenth annual convention, Hotel Dennis, Atlantic City, N. J.—A. Prescott Folwell, Secretary, 511 Flatiron Building, New York City.

PERSONALS

ADAMS, WILLIAM H., has been appointed Borough Engineer of Hanover, Pa.

ATWOOD, JOSHUA, Chief Engineer of the Street Department of Boston, Mass., has been appointed Superintendent of the Street Cleaning and Water Department.

BACHELLER, J. HENRY, has been re-appointed on the New Jersey Potable Water Commission and William S. Ackerman on the Passaic Valley District Sewage Commission.

BUSH, CHARLES A., York, Pa., has been named as Chief of Police by Mayor-elect Jacob E. Weaver, and Charles S. White as Chief of the Detective Bureau; the two departments will work in conjunction and a new system modeled after that of Baltimore, will be established.

CORSON, S. CAMERON, Borough Engineer of Norristown, Pa., has been re-elected.

DONCASTER, DANIEL, Chief of Police of Wilkinsburg, Pa., died recently, aged 31 years; prior to becoming a member of the Borough force a few years ago, he had been a detective on the Pennsylvania railroad.

DOUGLASS & MCKNIGHT have been appointed Engineers of Oakmont, Pa.

FREASE & SPERLING, of Wilkinsburg, Pa., have been appointed Engineers of Verona, Pa.

GRANT, L. M., has been appointed Constructing Engineer in charge of the development of the underground water supply at Spokane, Wash., succeeding E. C. Wood, resigned.

HALE, PERRY, has been re-appointed Superintendent of Water Works of Middletown, Conn.

HARDING, ROBERT J., has been appointed Superintendent and Engineer of the Board of Public Works of Poughkeepsie, N. Y.

HARRIMAN, E. H., New York City, has authorized the contribution of \$30,000 by the Southern Pacific Railroad to the Plague Fund, which the Citizen's Health Committee of San Francisco, Cal., is raising to exterminate rats, make the city sanitary and prevent the spread of contagion.

HAYES, NICHOLAS J., has been appointed Fire Commissioner of New York City, vice Hugh Bonner, deceased; he was Fire Commissioner during the first two years of Mayor McClellan's first administration, had also served six years as Deputy City Clerk, and was elected Sheriff in 1906, serving two years.

MCKENNA, MAURICE F., has been elected City Engineer of Bridgeport, Conn., by Council, and the action has been approved by Mayor Harry Lee.

MASSENBERG, T. L., Clerk of the City Council of Macon, Ga., died March 12, at the age of 70 years. Mr. Massenberg had long been prominent in the public life of Macon, being Captain of the famous Jackson Artillery during the Civil war.

MITCHELL, ANDREW S., Mayor of Eureka, Utah, was recently married to Miss Hannah Wise, of Salt Lake City, where the Mayor formerly resided.

PENNINGTON, SAMUEL B., Councilman of Chester, Pa., has been named by Mayor-elect David M. Johnson as Chief of Police and Edward Noden, formerly a member of the force, as Sergeant of Police.

TENNEY, MAYNARD A., who has been connected with the City Engineer's office of New Britain, Conn., has gone to Cuba on special work for the Department of Public Works; Mr. Tenney was engaged in much of the roadwork around Havana during the first American occupation.

WELLS, C. B., has been appointed City Engineer of Wichita, Kan.

TRADE NOTES

Cast Iron Pipe.—San Francisco. Inquiries are reported for lots aggregating 1,800 tons. Quotations: 6 to 12-inch, \$38; 4-inch, \$39. Birmingham. Considerable future business in sight. Prices on large contracts much at variance. Quotations: 4 to 6-inch, \$27; 8 to 12-inch, \$25; over 12-inch, average, \$24. New York. It is reported that an order for 772 tons, recently placed by the City of Grand Rapids at \$22.90, netted the bidder \$18.30 at the foundry in the South. If so, this is the lowest price recorded. Quotations: Car load lots of 6-inch, \$23.50 to \$24 at tide-water.

Pig Lead.—An advance of 15c. by the American Smelting & Refining Company March 13 was followed by one of 5c. the next day, and another of like amount March 16, bringing the price to 4c., New York, and 3.85c., St. Louis. This is the highest price since November. Considerable business was stimulated. No shortage of lead, however, is probable in the near future.

American Goods.—An American consul in Europe reports that a society recently organized in this district, whose members are expert technical men of all branches of trade, has just opened a special bureau of information with the view of promoting the importation of goods of foreign manufacture. This bureau desires to be furnished with catalogues and price lists of all kinds of goods of foreign make, so as to be able to put the local consumer in immediate direct communication with the manufacturers. The goods which are at present in demand are tools and machine tools for wood and metal, motors, shoes, shoemaking machinery, hair-cutting machines, steel, machines for tanneries, compressors and pneumatic installations, ventilators, agricultural implements, gearings, cables, electrical machinery, armatures for boilers, pumps, belts for transmission, medicaments, etc. Catalogues should also be sent to the Consul in question. Address No. 2058, Bureau of Manufactures, Washington, D. C.

New Car Brake.—A photograph of a brake suitable for surface, elevated and subway trains, which clamps the rail as well as the wheel, is on exhibition in the Transportation Department of the Population Congestion Exhibit at the Museum of Natural History, New York City. The photograph attracted the attention of Public Service Commissioner Edward M. Bassett and he will investigate its merits.

PATENT CLAIMS

881,503. Artificial Stone Sewer Cap. Ward F. Kennelly, Boston, Mass. Serial No. 383,503.

As a new article of manufacture, an artificial stone sewer cap having a central opening therethrough provided with a metallic reinforcing band and adapted for the reception of a suitable cover plate and reinforcing elements embedded within the material of said cap and encircling said openings, and comprising a rectangular wooden frame and a supplemental frame located therein and connected thereto for rigidly supporting said wooden frame, substantially as described.

881,015. Electric Arc Lamp. Louis C. H. Mensing, Rugby, England. Serial No. 244,943.

In an electric arc lamp a pair of inclined carbon tubes, a solenoid, a bridge F carried by the core of said solenoid and having inclined sleeves normally out of axial alignment with said tubes and adapted to be brought into such alignment by the rise of the core, a bridge H movable independently of said core and having inclined sleeves, an adjustable contact carried by said bridge H and adapted to be engaged by the bridge

F in the inward movement of the core, carbon points adapted to be inserted in said carbon tubes and through the respective sleeves of said bridges in a manner to have their points come substantially in contact, the combination operating as described.

881,035. Method of Making a Dustless Road Surface. Benjamin H. Thwaite, London, England. Serial No. 405,730.

The herein described method of making dustless road surfaces consisting in artificially heating the road surface and immediately spraying heated hydrocarbon thereon to provide a covering.

881,165. Throttling Device for Hydraulic Machinery. Clarence L. Taylor, Alliance, Ohio, assignor to the Morgan Engineering Company, Alliance, Ohio. Serial No. 265,351.

The combination with a fixed main cylinder, a smaller cylinder secured to the closed end of the fixed main cylinder and a liquid supply for the main cylinder leading to the smaller cylinder, of a hollow piston for the main cylinder, and a plunger carried by said piston and moving within the smaller cylinder, the said plunger and cylinder being shaped to permit the liquid to freely pass, and enter the main fixed cylinder except when the piston has approximately reached the ends of its stroke.

881,323. Street-Sweeper. John H. Long, New Philadelphia, Ohio. Serial No. 373,804.

A street sweeper comprising a frame, a brush head carried by the frame, a driving shaft, a counter shaft, chain and sprocket connections between the drive shaft, the counter shaft and the brush head, a dirt collecting receptacle carried by the frame for co-operation with said conveyor, a plate pivotally secured upon each side of the frame at the forward end of the latter, each of said plates having a slot, means connected with the frame and working in the slot of each plate to adjust the latter, a stub shaft carried by each plate, and a wheel carried by each stub shaft.

881,376. Mechanism for Controlling Fluid Pressure. Henry A. Carpenter, Sewickley, Pa., assignor to Ritter-Conley Manufacturing Company, Jersey City, N. J., a Corporation of New Jersey. Serial No. 87,698.

In a mechanism for controlling fluid pressure, the combination with a source of pressure, of a valve controlling the pressure supply, a fluid pressure operated device for the performance of work, a low pressure mechanism for supplying the fluid pressure operated device with fluid pressure, a high pressure mechanism for augmenting the fluid pressure supply at a predetermined time, automatic valves controlling the operation of the low and high pressure mechanisms, and means for automatically restoring the low and high pressure mechanisms to normal position after the work has been done.

INCORPORATIONS

American Web Tile and Sewer Company, Syracuse, N. Y.; to manufacture all kinds of tile made of clay; capital, \$100,000. Incorporators: William Cahill, Walter Welch and Edward F. Cahill.

Bessemer Gas Company, Bessemer, Ala.; for the distribution of gas in Bessemer; capital, \$100,000. Incorporators: B. J. Gay and J. T. Schley.

Citizens' Light and Power Company, Taylor, Tex.; capital, \$10,000. Incorporators: Howard Bland and E. A. Robertson.

Coast and Interior Contracting Company, New York, N. Y.; general contractors; capital, \$100,000. Incorporators: A. V. Jones, 123 West One Hundred and Sixteenth street; F. W. Mills, 154 Nassau street; H. M. Brown, 422 St. Nicholas avenue, all of New York.

Klervin Company, Auburn, N. Y.; to manufacture smoke preventatives, consumers, etc.; capital, \$50,000. Incorporators: Frank H. Messenger, Auburn, N. Y.; Ray S. Messenger, Geneva, N. Y.; Isaac M. Sullivan, Springfield, Ohio.

Mutual Benefit Electric Light and Power Company, Jersey City, N. J.; to supply and distribute electricity for light, heat and power; capital, \$2,500,000. Incorporators: Jean R. Blinck, Richard S. Carrick, John F. Nagle, Jersey City; James M. Seymour, Jr., Newark, N. J.

Orvis Economy Furnace Company, New York, N. Y.; to manufacture boiler furnace appliances and device for eliminating smoke; capital, \$500,000. Incorporators: Orland D. Orvis, 115 West Ninety-sixth street; Joseph A. Prout, 350 West Twenty-eighth street; John E. Claffy, 34 East Forty-fifth street; Harry Wilber, 430 West One Hundred and Eighteenth street, all of New York.

Osceola Electric Light Company, Osceola, Wis.; capital, \$4,000. Incorporators: C. C. Ladd, W. C. Bloom and others.

St. James Ice and Power Company, St. James, Mo.; to manufacture electric power and gas; capital, \$20,000. Incorporators: Lewis Decker, St. Louis, Mo., and others.

THE WEEK'S CONTRACT NEWS

Relating to Municipal and Public Work—Street Improvements—Paving, Road Making, Cleaning and Sprinkling—Sewerage, Water Supply and Public Lighting—Fire Equipment and Supplies—Buildings, Bridges and Street Railways—Sanitation, Garbage and Waste Disposal—Police, Parks and Miscellaneous—Proposals and Awards

To be of value this matter must be printed in the number immediately following its receipt, which makes it impossible for us to verify it all. Our sources of information are believed to be reliable, but we can not guarantee the correctness of all items. Parties in charge of proposed work are requested to send us information concerning it as early as possible; also corrections of any errors discovered.

BIDS ASKED FOR

STATE	CITY	RECEIVED UNTIL	NATURE OF WORK	ADDRESS INQUIRIES TO
Street Improvements				
New York	Brooklyn	March 25, 11 A.M.	Repaving sandstone on concrete, etc., Fulton St.	Bird S. Coler, Boro. President.
Texas	Palestine	March 25, 4 P.M.	Constructing 25,000 sq. yds. street paving.	S. P. Allen, City Secretary.
Pennsylvania	Harrisburg	March 25	Constructing 3 State roads, 18,043 ft.	Jos. W. Hunter, St. H'way Com'r.
Kentucky	Louisville	March 25	Granite block, paving 18th and Clay Sts.; cost, \$26,000.	Board of Public Works.
Missouri	Kansas City	March 26, 11 A.M.	Grading sts., 20 contracts; art. stone curb and walks, 16; brick pave, 3.	E. A. Harper, City Engineer.
Ohio	Cleveland	March 26, noon	Brick, Medina block, paving, curb, etc., 2 streets.	A. R. Callow, Sec'y Bd. Pub. Service.
Oklahoma	Shawnee	March 26	Constructing 100 blocks, brick, asphalt and macadam.	C. E. Brown, City Engineer.
Pennsylvania	Scranton	March 26	Bitulithic paving, 2 sts.; asphalt, Capouse Ave.	C. R. Acker, Dir. Pub. Works.
Missouri	St. Charles	March 26	Sidewalk, 55,000 sq. feet; 12,800 lin. ft. curb and gutter, \$20,000.	H. E. Steinmann, City Engineer.
Pennsylvania	Harrisburg	March 26	Constructing 3 State roads: total, 29,918 ft.	Jos. W. Hunter, St. H'way Com'r.
Ohio	Cincinnati	March 27, noon	Improving Mt. Nebo Cliff road, Miami twp., also stone road.	Fred. Dreihls, Clk., Co. Com'rs.
Minnesota	Minneapolis	March 27, 7:30 P.M.	Furnishing 50,000 sq. yds. creosoted wood block.	Andrew Kinker, City Engineer.
Indiana	Valparaiso	March 27, 8 P.M.	Constructing 30,619 sq. yds. brick, 11,211 with sand, and 25,328 with asphalt filler; all on macadam; cement curb.	G. F. Stinchfield, City Engineer.
Pennsylvania	Harrisburg	March 27	Constructing 4 State roads, 34,655 ft.	Jos. W. Hunter, St. H'way Com'r.
Florida	Jacksonville	March 27	Paving, macadam or oyster shell, 3 miles, Turner road.	Gail L. Barnard, County Engineer.
Washington	Centralia	March 27	Street grading and sidewalks imp.; cost, \$29,000.	The Mayor.
Indiana	Woolf Place	March 28, 8 P.M.	Grading and paving with concrete, several streets.	Frank H. Goheen, Town Clerk.
Nebraska	Lincoln	March 28	Asphalt and brick paving, curb, etc., 4 Districts.	Thomas H. Pratt, City Clerk.
New Jersey	Bogota	March 28	Bldg. 8,250 lin. ft. concrete walk; curb, gutter, etc., Floral Hts.	Lem. Lozier, Hackensack, C. E.
Minnesota	Minneapolis	March 30, 11 A.M.	Grading and macadamizing various roads.	H. R. Scott, County Auditor.
New Jersey	Asbury Park	March 30, noon	Laying 14,500 sq. yds. vit. or creos. wood block, 2 streets.	Wm. C. Burroughs, City Clerk.
Alabama	Fort Morgan	March 30, 1:30 P.M.	Constructing vit. brick roads at post.	Capt. L. F. Garrard, Q. M. U. S. A.
Iowa	Des Moines	March 31, 9 A.M.	Furn. brick, cement, lumber, etc., in 1908.	W. W. Wise, Bd. Pub. Works.
Indiana	Ft. Benj. Harrison	March 31, 11 A.M.	Constructing a gravel road at post.	Capt. Geo. H. Penrose, Q. M., U. S. A.
Georgia	Augusta	March 31, noon	Brick or Belgian block paving, 13th St., 14,000 sq. yds.	Nisbet Wingfield, City Eng'r.
Louisiana	Opelousas	March 31	Constructing 2,500 feet cement sidewalks, 6 feet wide.	B. A. Littell, Mayor.
Ohio	Lorain	March 31	Repairing Tenth Ave. from Penfield Ave. to Fulton St.	A. W. Thomas, City Engineer.
New Jersey	Phillipsburg	April 1, 11 A.M.	Constructing Hopatcong road 13,688 feet long.	Jos. R. Thatcher, Dir. Bd. Freeholders.
New York	Port Wood	April 1, 11:30 A.M.	Constructing roads and walks at post.	C. C. Burnell, Q. M., U. S. A.
Illinois	Mt. Carmel	April 1	Paving, cost, \$40,000; also 5 miles paving later.	Guy W. Courter, City Engineer.
North Carolina	Statesville	April 1	Grading and macadamizing 2½ miles of road.	C. M. Miller, Salisbury, Eng.-in-Ch'f.
Mississippi	Brookhaven	April 1	Working streets by contract.	City Council.
Ohio	Toledo	April 1	Paving Franklin Ave.	Reynold Voit, Sec'y B.I. Pub. Serv.
Illinois	Oak Park	April 2, 8:30 A.M.	Asphalt paving, comb. curb and gutter, Oak Park Ave.	B. C. Brandstaedt, Sec'y Bd. Local Improvement.
New Jersey	Washington	April 2, 11 A.M.	Constructing 2.6 mile stone road for Warren Co.	Jos. R. Thatcher, Dir. Roads.
Michigan	Grand Rapids	April 2	Constructing 4,260 sq. yds. bituminous macadam.	L. W. Anderson, City Engineer.
Pennsylvania	Washington	April 2	Constructing 13,242 ft. road N. Strabane twp.	Jos. W. Hunter, Harrisburg, Street Highway Commissioner.
Indiana	Madison	April 2	Cement walks, curbs, grading, 6 streets.	S. W. Weyer, City Engineer.
Indiana	Rushville	April 2	Improving highway, line between 3 counties.	A. L. Wynship, Rush Co. Aud.
Pennsylvania	Harrisburg	April 2	Bldg. 3 state roads; 9,675 ft.; 10,467 ft.; 13,250 ft. long.	Jos. W. Hunter, St. Hwy. Com'r.
Pennsylvania	Lansdowne	April 3, 8 P.M.	Laying curb and gutter; bid for work up to 100,000 ft.	A. F. Damon, Eng'r, Darby.
Pennsylvania	Somerset	April 3	Reconstructing National pike from Boro. line.	Jos. W. Hunter, Harrisburg, State Highway Commissioner.
Ohio	Troy	April 3	Constructing macadam road, 2,800 ft. long.	E. E. Pearson, County Auditor.
Pennsylvania	Paint	April 3	Bldg. state road, 13,350 feet long in Paint twp., etc.	Jos. W. Hunter, St. Hwy. Com'r Harrisburg.
New Jersey	Hobokus	April 4, 3 P.M.	Constructing 1.65 miles of stone road.	R. Wanamaker, Engineer.
New Jersey	Salem	April 4, 3 P.M.	Constructing 3.2 miles Penn's Grove and Dancer's Mill road.	J. F. Ayres, Dir. Bd. Freeholders.
New Jersey	Ramsey	April 4	Constructing 2.64 miles of stone roads.	R. Wanamaker, Mah. Wah, C. E.
Dist. of Columbia	Washington	April 4	Macadam roads, concrete walks, etc., Gen. Hosp. Reserv.	Capt. H. L. Pettus, Q. M., U. S. A.
Ohio	Richwood	April 4	Vit. brick paving, curb, etc., Franklin St. and Conboy Alley.	R. L. Gordon, Village Clerk.
Indiana	Vernon	April 6, 11 A.M.	Constructing 2½ miles of pike road, Spencer township.	T. L. Thomas, County Auditor.
Indiana	Knox	April 6, noon	Constructing 12 gravel roads, 162,309 ft. long.	Lee M. Ransbottom, Co. Auditor.
Indiana	Lawrenceburg	April 6, noon	Grade, drain, pave, road bed, 12,084.8 ft. of road in twp.	Wm. S. Fagaby, County Auditor.
Indiana	Hartford City	April 6, noon	Bldg. Dowell gravel and macadam road, 11,370 ft. long.	L. W. Dougherty, County Auditor.
Indiana	Richmond	April 6, 1 P.M.	Constructing gravel road, 3 miles long, Washington township.	Demas S. Coe, County Auditor.
Indiana	Columbus	April 6, 2 P.M.	Constructing 3 miles gravel road, Ninevah township.	County Commissioners.
North Dakota	Devils Lake	April 6	Constructing sidewalks.	Ole Skratass, City Clerk.
Indiana	Danville	April 6	Constructing Ewing macadam road, 7,120 ft. long, Ewing twp.	Wm. H. Nichols, County Auditor.
Indiana	Delphi	April 6	Constructing 11 miles of gravel road, Burlington twp.	M. G. Haun, County Auditor.
Ohio	Zanesville	April 6	Paving and curbing Ninth St. from Main to Marietta St.	J. T. Hahn, Clk. Bd. Pub. Serv.
Indiana	Madison	April 7, 10 A.M.	Bldg. macadam road 8,476 ft. long, 12 ft. wide, 12 ins. deep, \$3,680.	G. F. Crozier, County Auditor.
Indiana	Jasper	April 7, 1 P.M.	Bldg. 4 miles and 80 ft. free turnpike road, Bainbe. township.	M. A. Sweeney, County Auditor.
Indiana	Vincennes	April 7, 2 P.M.	Constructing 17,976 feet gravel road, in 3 townships.	John T. Scott, County Auditor.
Indiana	Martinsville	April 7, 2 P.M.	Constructing 3 gravel roads, 16,183 ft. long.	B. E. Thornburg, County Auditor.
Indiana	Frankfort	April 7, 2 P.M.	Constructing 20 miles of gravel roads.	Charles F. Cromwell, Co. Auditor.
Connecticut	Waterbury	April 7, 8 P.M.	Grading Clark St. from James St. to Washington Ave.	R. A. Cairns, City Engineer.
New Jersey	Bloomfield	April 7	Furnishing 2,000 tons broken stone at points in town.	Wm. L. Johnson, Town Clerk.
Indiana	Vernon	April 7	Constructing 6½ miles of free turnpike.	A. L. Thomas, County Auditor.
Indiana	Covington	April 7	Bldg. gravel road, 14,165 ft. long; also 2 other roads.	W. B. Gray, County Auditor.
Nevada	Reno	April 13	Asphalt paving and grading, 4 streets.	H. E. Christie, City Clerk.
Salvador, C. A.	San Salvador	May 1	Paving certain sts. with stone, asphalt joints, measuring 18,586 meters; nat. or art. stone on solid pressed material.	Ernest Schernikow, Consul, 42 Broadway, New York City.
Minnesota	Fork	May 1	Constructing five miles of roads.	J. P. Lein, Township Clerk.
Illinois	Anna	May 1	Constructing 24,758 sq. yds. brick pavement.	C. W. Brown, Jacksonville, C. E.
Indiana	Crawfordsville	June 8	Paving 5 blocks on College, Water and Walnut Sts.	B. R. Johnston, City Engineer.
Water Supply				
Massachusetts	Springfield	March 25, 2 P.M.	Bldg. sed. basin, 6 covered masonry filters, bldgs., etc.	E. E. Lochridge, Ch. Engr. W. Bd.
Massachusetts	Wellesley	March 26, noon	Furn. 5,000 ft. 10-in.; 6,000 ft., 8-in.; 9,630 ft., 6-in.; c. i. water pipe; specials; valves; three 10-in.; four 8-in.; 14 6-in.; 21 boxes; 40 two-way hydrants in 5½ ft. trench.	Chas. N. Taylor, Contracting Eng'r.
South Dakota	Pine Ridge Ag'cy	March 26, 2 P.M.	Furn. and erect. 25,000-gal. steel water tank and tower.	Com'r Ind. Aff's, Wash., D. C.
Wisconsin	Loyal	March 26, 2 P.M.	Furn. 3,880 feet 4, 6, 8-in. c. i. pipe, 10 hydrants, 6 valves, etc.	J. M. Philpott, Village Clerk.
New York	New York	March 26, 3 P.M.	Furnishing vit. stoneware drain pipe.	Henry Smith, Pres. Clk. Bd.
New York	Rome	March 28, noon	Bldg. dam on Fish Creek, etc., inc. tunnel 5,500 ft. long; 36-in. masonry aqueduct, 31,000 ft. long; 12,000,000-gal. distributing reservoir, all with their accessories.	Hervey S. Bedell, Chm. W. & S. Coms.
Minnesota	Stillwater	March 30, noon	Erecting water tower at new State prison.	Clarence H. Johnston, St. Paul, Arch.
Iowa	Sioux City	March 30	Furn., complete, open type feed water heater, 300 h.p.; also boiler feed pump of 500 h.p. capacity, Main St. station.	S. L. Etnyre, City Engineer.

Water Supply—Continued.

New York	McGraw	March 30, 2 P.M.	Constructing water works for village of McGrawville; inc. pump 200 to 325 gals. per min.; c.i. pipe: 26 tons, 8-in.; 42 tons, 6-in.; 147 tons, 4-in.; 1,200 lbs. specials; 1,400 ft. 1½-in. wrought iron pipe; 13,200 lbs. lead; 250 lbs. jute; 36 hydrants; 25 gates; 25 gate boxes.	W. G. Stone, Mann Bldg., Utica, C.E.
Georgia	Atlanta	April 1, 5 P.M.	Building 350,000,000 gal. reservoir with 250,000,000 gals. available, inc. 125,000 cubic yds. exc. Cost \$30,000.	Park Woodward, Gen. Mgr. Nat. Com.
Kentucky	Versailles	April 1	Constructing \$60,000 water works and sewer system	The Holmboe Co., Louisville, Engrs.
Georgia	Montezuma	April 1	Bldg. canal power system and pumping station	Dr. C. H. Richardson, Mayor.
Ohio	Hudson	April 1	Constructing water works and other improvements	D. M. Hosford, Cleveland, C. E.
Georgia	Atlanta	April 1	Bldg. 350,000,000-gal. reservoir, with 250,000,000 gals. available, inc. 125,000 cu. yds. exc.; cost, \$30,000.	Park Woodward, Gen. Mgr. Nat. Com.
Colorado	Platteville	April 1	Material and labor for sinking 4-in. soft water well.	W. D. Egner, Town Clerk.
Pennsylvania	Berwick	April 2, noon	Bldg. concrete and earthen dam; imp. reservoir.	T. Chalkley Hatton, Wil., Del., C. E.
Michigan	Grand Rapids	April 2, 5 P.M.	Additional water supply, etc. for Kent Co. Home, inc. pumping station elevated or pressure tank, water mains, etc.	J. J. Wernette, Houseman Bldg., C.E.
Minnesota	Rushford	April 8, 8 P.M.	Extending water system	C. O. Alm, City Clerk.
Kansas	Quindaro	April 10	Bldg. intake pier for Kansas City, Mo., water works	E. A. Harper, K. C., Mo., City Eng'r
North Carolina	Maxton	April 14, 7:30 P.M.	Installing water works system; also material.	R. M. Williams, Mayor.
Iowa	Council Bluffs	May 18, 4 P.M.	Constructing water works plant, embracing power plant complete, settling reservoirs, distributing system and high-pressure reservoir.	W. F. Sepp, City Clerk.

Sewerage

Washington	Fort Casey	March 26, 11 A.M.	Repairing and extending sewer outlet at Fort Casey	Chief O. M., Vancouver Barracks.
Missouri	Kansas City	March 26, 11 A.M.	Constructing sewers in Dist. No. 238.	E. A. Harper, City Engineer.
Oklahoma	Alva	March 26, 8 P.M.	Constructing sanitary sewer system	Burns & McDonnell, K. C., Mo., Engineers.
Iowa	Remsen	March 27, 7:30 P.M.	Bldg. sewage disposal plant, 15,700 gal. tank, two sand filter beds, 6,000 sq. ft. each; also 2,775 ft. 12-in., 1,555 ft. 8-in. sewer, with sub-drain, etc.	A. Marston & F. M. Okey, Ames, Engineers.
Minnesota	Duluth	March 27	Bldg. sanitary main trunk sewer, Elinor St. & 49th Ave.	R. Murchison, Clk. Bd. Pub. Wks.
Washington	Spokane	March 27	Bldg. drain con. Manito Lake Park with sand pit.	H. J. Gibbon, Sec'y Pk. Com'rs.
Ohio	Cleveland	March 28, 11 A.M.	Bldg. culvert in Pitney road, East Cleveland.	A. B. Lea, County Surveyor.
New Jersey	Bogota	March 28	Laying 3,400 ft. 8-in., 920 ft. 12-in. pipe sewer, etc.	Floral Hts. Realty Co.
Georgia	Tifton	March 30, noon	Furn. material and bldg. sanitary system; 6 miles 8-15-in. pipe.	J. B. McGrady & Co., Atlanta, C. E.
Indiana	Danville	March 30, 2 P.M.	Constructing steel pipe.	Wm. H. Nichols, County Auditor.
Pennsylvania	St. Marys	March 30, 8 P.M.	Bldg. system double-strength vit. pipe, sanitary sewers: 3,531 ft., 15-in.; 5,605 ft., 12-in.; 6,189 ft., 10-in.; 40,852 ft., 8-in.; 184 manholes, 38 flush tanks; cont. let for furn. material.	L. C. Hanhauser Boro Secretary.
Pennsylvania	Erie	March 30	Constructing sewer.	B. E. Briggs, City Engineer.
Iowa	Des Moines	March 31, 9 A.M.	Furnishing sewer and drain pipe, etc., for 1908.	Geo. F. Poorman, City Clerk.
Connecticut	W. Hartford	March 31, 11 A.M.	Constructing Park St. sewer system, inc. 1,764 ft. 15-in., 6,872 ft. 12-in., 1,360 ft. 10-in., 7,593 ft. 8-in., 6,684 ft. 16-in., 55 manholes, etc.	A. B. Alderson, Town Engineer.
Minnesota	Redwood Falls	March 31, 2 P.M.	Digging and bldg. tile and open ditch No. 7; cost, \$19,400.	L. P. Larson, County Auditor.
Colorado	Fort Morgan	March 31, 8 P.M.	Bldg. 56,000 ft. 8-in., 3,100 ft. 10-in., 6,300 ft. 12-in., 2,400 ft. 15-in. sewer; 48 ft. 16-in. c. i. outlet; 125 manholes; 27 flush tanks; 4,000 ft. 4-in. water service pipe.	C. C. Rickel, City Clerk.
California	Oakland	April 1, 11 A.M.	Bldg. storm sewer, Grove and Jones Sts.; bond, \$10,000.	W. B. Fawcett, Sec'y Bd. Pub. Wks.
Nebraska	Lancaster	April 1, noon	Constructing sewers, portion Dist. No. 3.	Geo. H. Brown, Chm. B. P. S.
Nebraska	Grand Island	April 1, 5 P.M.	Laying 3,748 ft. 15-in., 688 ft. 8-in. vit. or concrete sewer, etc.	H. E. Clifford, City Clerk.
Kentucky	Louisville	April 2, noon	Constructing Sec. C of Southern Outfall sewer.	J. B. F. Breed, City Engineer.
Ohio	Put-in-Bay	April 2	Constructing sewers in Dist. No. 2.	Chas. E. DeWitt, Port Clinton, C. E.
Missouri	St. Louis	April 3, noon	Bldg. Glaise Creek sewer, inc. 3,204 ft. 11" 11' x 12' 6" rein. concrete sewer in open cut and 116 ft. in tunnel; also 862 ft. 12-24-in. pipe sewer.	H. R. Fardwell, Sec'y Bd. Pub. Imp.
Nebraska	Holdreige	April 3	Furn. mat. & bldg. complete sanitary sewer system.	M. A. Earl & Co., Muskogee, Okla., Engineers.
Kansas	Lawrence	April 6, 5 P.M.	Labor and material, 2 sewers; 330 ft. 10-in. pipe, 700 ft. 8-in.; also 575 ft. 8-in.; 75 ft. 6-in., etc.	F. D. Brooks, City Clerk.
North Dakota	Fargo	April 6, 5 P.M.	Constructing 12-in. lateral sewer in Fourth St.	N. C. Morgan, City Auditor.
Kansas	Wichita	April 6	Constructing sanitary sewers in Dist. No. 9.	R. N. Dorr, City Clerk.
Missouri	Moberly	April 6	Constructing pipe sewers	J. F. Curry, City Clerk.
North Dakota	La Moure	April 7, 2 P.M.	Furnishing corrugated galvanized metal culverts.	E. W. Field, County Auditor.
Iowa	Le Mars	April 7, 8 P.M.	Bldg. 1,572 ft. 8-in. sewer, 6 manholes, 1 flush tank.	D. N. Hoffman, City Clerk.
Missouri	Springfield	April 7	Bldg. 1,474 ft. 8-in. pipe in Dist. 12, Section 4.	H. G. Horton, City Engineer.
Michigan	Grand Rapids	April 9, 8 P.M.	Bldg. sewer S. Front St., inc. embank., gates, pump con., etc.	S. A. Freshnay, Bd. Pub. Wks.
Mississippi	Canton	April 9	Constructing sewer system, inc. 7 miles 6 to 18-in. pipe.	W. G. Kirkpatrick, Jackson, C. E.
South Dakota	Huron	April 10, 8 P.M.	Constructing two main lines of sewer.	M. Schoenert, City Clerk.
North Carolina	Maxton	April 14, 7:30 P.M.	Bldg. Sewer System; also furnishing material on both.	R. M. Williams, Mayor.
New York	Fort Slocum	April 15, 10 A.M.	Constructing a sewer system.	Constr. O. M., U. S. A.
Colorado	Alamosa	April 15, 4 P.M.	Constructing sanitary sewer; also 37,938 sewer bonds.	Geo. A. Willis, City Clerk.
Illinois	Anna	May 1	Constructing sanitary sewers, to cost \$20,000.	J. L. Hammond, City Clerk.

Public Buildings

Wisconsin	Milwaukee	March 26, 10:30 A.M.	Constructing public natatorium at Center and Richards Sts.	C. J. Poetsch, City Engineer.
Michigan	Mt. Pleasant	March 26, noon	Erecting Physical Training Bldg. for Cen. Mich. Normal School.	E. W. Arnold, Battle Creek, Arch.
Iowa	Reinbeck	March 26, 4 P.M.	Bldg. school, inc. heating and plumbing.	H. E. Netcott, Independence, Arch.
Connecticut	Stamford	March 26	Erecting West Side school; Boring & Tilton, N. Y. City, Archts.	J. G. Houghton, First Selectman.
Minnesota	St. Paul	March 26	Bldg. 4-story pressed brick and cut stone addition to City Hospital 45 x 100 ft., fire-proof; complete, \$120,000.	C. H. Johnston, Manh. Bldg., Arch.
Wisconsin	Milwaukee	March 26	Erecting natatorium, inc. heating, wiring, etc.	C. J. Poetsch, City Engineer.
Indiana	Spartanburg	March 26	Erecting brick school.	Dr. T. W. Morgan, Sec'y Adv. B.I.
Ohio	Canton	March 27	Bldg. 8-room school on Summit St.	Oscar Steiner, Architect.
Oregon	Prineville	March 28, 10 A.M.	Bldg. base; also superstructure Co. Court House.	W. D. Pugh, Arch., Portland.
Iowa	Des Moines	March 28, 11 A.M.	Bldg. 3-story stone City Hall, 74 x 230 ft.; cost, \$350,000.	Proudfoot & Bird, Crocker Bldg., Arch.
Wisconsin	Oshkosh	March 28, 2 P.M.	Erecting addition to Dale school, Wm. Waters, Architect.	W. A. Marden, Chm. Bd. Pub. Wks.
Illinois	Kankakee	March 28	Erecting 2-story bldg. Ill. Hospital for Insane.	J. L. Greene, Supt.
Arkansas	Little Rock	March 28	Bldg. 3-story brick and steel Glenwood school; cost, \$40,000.	Gibbs & Sanders, Architects.
New York	Syracuse	March 30, 3 P.M.	Bldg. Manf. & Liberal Arts Bldg. on State Fair Grounds; cost, over \$200,000; Green & Wicks, Buffalo, Archts.	A. E. Perren, State Fair Com'r.
Massachusetts	Haverhill	March 30, 8 P.M.	Erecting high school building.	High School Commission.
Iowa	Keota	March 30	Bldg. 2-story school; 86 x 66 ft., brick and sandstone, etc.	O. H. Carpenter, Iowa City, Arch.
Ohio	Columbus	March 30	Erecting Indianola School; cost, \$65,000.	David Riebel, Architect.
Texas	Richmond	March 30	Erecting a County Court House; cost, \$75,000.	County Judge.
Tennessee	Nashville	March 30	Competitive plans for 8-room, \$30,000 school.	Board of Education.
New York	New York	March 30	Alterations, additions, etc., various schools.	C. B. J. Snyder, Supt. Sch. Bldgs.
Michigan	Bessemmer	March 30	Erecting a County Poor House.	Charlton & Kuenz, Marg., Archts.
Minnesota	Stillwater	March 30	Bldg. factory, warehouse, water tower, boiler house, etc.	Control Bd., State Prison, Madison.
Indiana	Kent	March 31, 10 A.M.	Bldg. 2-story brick school. Republican twp.; also heat plant.	Otto Hasfurter, School Trustee.
New York	Wampsville	March 31	Plans for \$150,000 Court House and jail.	Jas. A. Loyster, Cazenovia, Chm. Bldg. Com.
Ontario	Woodstock	March 31	Constructing 8-room school; not to exceed \$20,000.	W. A. Reed, Sec'y Bd. Education.
Ohio	Ironton	April 1, 10 A.M.	Furniture and fixtures for new Co. Court House.	A. C. Robinson, County Auditor.
Indiana	Ft. Wayne	April 1, 11 A.M.	Bldg. school, Dist. No. 4, Jackson township.	Henry W. Meyer, Architect.
Wisconsin	Delavan	April 1, noon	Bldg. dormitory at Wis. School for Deaf.	St. Bd. of Control, Capitol, Madison.
North Dakota	Ft. Lincoln	April 1, 1:30 P.M.	Erecting, etc., brick addition to nosh hospital.	Lt. Bowers Davis, O. M., U. S. A.
Pennsylvania	Erie	April 1, 3 P.M.	Heating and vent. system, Erie high school; cost, \$40,000.	W. J. Flynn, Sec'y Bd. Education.
Nebraska	Schuyler	April 1	Erecting \$11,000 City Hall; J. P. Guth, Paxton Bldg., Omaha.	The Mayor.
New Jersey	Weehawken	April 1	Competitive plans for \$50,000 fire-proof hospital.	J. M. Rector, M.D., Union.
Nebraska	Lincoln	April 1	Bldg. \$100,000 mech. engr. laboratory, Univ. of Nebraska.	Chas. E. Chownis, Supt. Constr.
Kentucky	Ashland	April 1	Comp. plans, etc., for 10-room school, complete, \$25,000.	Geo. F. Parks, Sec'y Bd. Educ.
Massachusetts	Chicopee	April 1	Erecting 10,000 manual training school.	Alderman & Co., Holyoke, Arch.
Virginia	Roanoke	April 1	Bldg. addition to City Hall; also excavating basement.	W. B. Bates, City Engineer.
Ohio	Toledo	April 1	Erecting fire engine house, Detroit and Central Avenues.	Amos McDonnell, City Auditor.
New York	Rochester	April 2, noon	Bldg. new school on Clifford St.; J. Foster Warner, Archt.	J. S. Mullan, Sec'y Bd. Educ'n.
New York	Whitesboro	April 2, 7:30 P.M.	Labor and material for Fire Dept. bldg.; separate bids.	W. G. Frank, Utica, Architect.

Public Buildings—Continued.

New York	Rochester	April 3	Erecting school No. 26, Clifford St.; cost, \$75,000	J. Foster Warner, Archt.
Florida	Miami	April 3	Constructing new school; W. C. De Garmo, Architect	Bldg. Com., School Board
Ohio	Westerville	April 3	Erecting 4-room addition to public school	Frank L. Packard, Col'b's, Archt.
Pennsylvania	Easton	April 3	Constructing extension to County jail	N. G. Crosby, Clk., Co. Com'rs
New York	Corning	April 4, 3 P.M.	Constructing U. S. Post Office	James Knox Taylor, Wash., D. C.
New Jersey	Elizabeth	April 4	Plans for \$75,000 school building	A. Hughes, Sec'y Bd. Education
Pennsylvania	Hazleton	April 6, 3 P.M.	Constructing, complete, U. S. Post Office	James Knox Taylor, Wash., D. C.
Georgia	Irwinville	April 6	Erecting jail for Irwin County; cert. check, \$1,000	T. Firth Lockwood, Arch., Columbus
Georgia	Ocella	April 6	Erecting Co. jail; T. F. Lockwood, Columbus, Arch.	H. T. Fletcher, Chm. Co. Com'rs
Idaho	Coeur d' Alene	April 6	Constructing \$40,000 City Hall	Williams & Graham, Architects
Wisconsin	Spring Green	April 6	Bldg. brick high school in Joint School Dist. No. 2	T. W. Reely, Ft. Dodge, Ia., Archt.
Mississippi	Port Gibson	April 6	Install steam heat plant, Court House and jail	A. K. Brashear, Clk. Bd. Co. Superv.
Ohio	Cleveland	April 6	Steam piping, wiring, etc., Tech. High School; lab. and mat. separate	Chas. Orr, Dir. Schools
Wisconsin	Madison	April 7, noon	Masonry, plumbing work, roofing, etc., E. wing new Capitol	Lew. F. Porter, Sec'y Capitol Com'n.
Kansas	Beloit	April 7, 2 P.M.	Bldg. frame hospital for Girls' Indus. School; cost, \$4,000	F. W. Knapp, Sec'y Bd. Con., S. C. I.
Missouri	Nevada	April 7, 3 P.M.	Constructing, complete, U. S. Post Office	James Knox Taylor, Wash., D. C.
New York	Whitesboro	April 7	Bldg. brick engine house; also lighting and heating	J. C. Eberley, Jr., Village Clerk
Virginia	Portsmouth	April 8, 3 P.M.	Constructing, complete, Federal Building	James Knox Taylor, Wash., D. C.
Georgia	Cairo	April 8	Bldg. \$40,000 Co. Court House and \$13,000 jail	Alex Blair, Macon, Architect
Illinois	Dixon	April 9, 3 P.M.	Constructing U. S. Post Office	James Knox Taylor, Wash., D. C.
Pennsylvania	Pine Grove	April 10, noon	Constructing an armory building	State Armory Board, Harrisburg
Pennsylvania	Williamsport	April 10, noon	Constructing an armory building	State Armory Board, Harrisburg
Pennsylvania	Reading	April 10, noon	Constructing an armory building	State Armory Board, Harrisburg
Mississippi	Jackson	April 10, 3 P.M.	Constructing extension to Post Office	James Knox Taylor, Wash., D. C.
Alabama	Bessemer	April 11, 3 P.M.	Constructing, complete, U. S. Post Office	James Knox Taylor, Wash., D. C.
South Dakota	Wessington Sp'gs	April 11	Bldg. \$22,000 school; J. P. Eisentraub, Sioux City, Arch.	M. Della England, Clk., School Bd.
Michigan	Ionia	April 14, noon	Constructing asylum bldg. for State Asylum	Jos. E. Mills, Arcade Bldg., Detroit, Architect
Washington	Tacoma	April 14, 3 P.M.	Constructing, except elevators, Federal Building	James Knox Taylor, Wash., D. C.
Ohio	Mercer	April 14	Erecting \$7,000 school bldg; Howard, Insko & Merriam, Archts.	W. H. Meding, Clk. School Board
Nebraska	Lincoln	April 14	Bldg. hosp. at Grand Island; Administration Bldg., Milford	Geo. C. Junkin, State Sec'y
New York	Ithaca	April 15, 3 P.M.	Constructing, complete, U. S. Post Office	James Knox Taylor, Wash., D. C.
New York	Albany	April 15, 5 P.M.	Competitive plans for new Prison at Sing Sing; 30 fire-proof bldgs. in groups; 1,400 cells; cost \$2,000,000	Chas. F. Howard, Pres. Com'n New Prisons
Virginia	Fredericksburg	April 15	Furn. material and erecting school	S. W. Somerville, Chm. Com. Schools
Indiana	Michigan City	April 23	Erecting 98,000 Co. Court House; Mahurin & Mahurin, Ft. Wayne	C. H. Miller, La Porte, Co. Aud.
Minnesota	Crookston	April 28, 3 P.M.	Constructing, complete, U. S. Post Office	James Knox Taylor, Wash., D. C.
South Dakota	Watertown	April 28, 3 P.M.	Constructing, complete, U. S. Post Office	James Knox Taylor, Wash., D. C.
Pennsylvania	New Castle	May 1	Erecting 3-story brick and stone high school, 200 x 190 feet, estimated cost, \$250,000	W. G. Echles, Lawrence, Tr. Bldg., Architect

Bridges

New York	New York	March 26, 2 P.M.	Furnishing pipe rails, railway posts, fittings, Brooklyn Bridge	J. W. Stevenson, Com'r Bridges
Indiana	Frankfort	March 26	Bldg. concrete arches; also repairs to Co. bridges in 1908	County Auditor
Wisconsin	Milwaukee	March 27, 10:30 A.M.	Bldg. Sec. 2 super. Wash. Ave. viaduct; check, \$30,000	C. J. Poetscher, City Engineer
Missouri	Independence	March 27, 11 A.M.	Bldg. three 3-ft. and two 4-ft. stone arch culverts; also rubble masonry abut. for bridge and remodel steel truss bridge	Oscar Koehler, County Surveyor
Manitoba	Winnipeg	March 27	Second-hand single-track through truss and 2-span steel railway bridge; one-span, 155-165, one 100 to 115 ft. long	M. Peterson, Sec'y Bd. Control
Ohio	Cleveland	March 28 11 A.M.	Bldg. culvert on Pitney road, E. Cleveland	A. B. Lea, County Surveyor
Ohio	Washington, C.H.	March 28	Bldg. sub and superstructure over Sugar Crk.; also Point Creek	H. G. Chaffin, County Auditor
Ohio	Sidney	March 28	Furn. material and bldg. steel high-truss bridge, 16-ft. roadway; either 125-ft. span or 2 spans, 68 ft., low truss; also plans	J. C. Rosser, County Auditor
Indiana	South Bend	March 30, 11 A.M.	Bldg. 2 concrete arch bridges in Penn. twp.	John W. Harbow, County Auditor
Ohio	Newark	March 30, 1:30 P.M.	Bldg. steel superstructure Church St., 204-ft. span	Licking County Commissioners
Ohio	Elyria	March 30	Constructing steel bridge in La Grange township	O. H. Fauver, County Surveyor
Iowa	Des Moines	March 31, 11 A.M.	Bldg. rein. concrete culvert, E. 30th and North Sts.	W. W. Wise, Bd. Pub. Wks.
Minnesota	Buffalo	March 31, 1:30 P.M.	Furn. material; also bldg. bridge over Croix River	H. C. Brase, County Auditor
Minnesota	Watertown	March 31	Furn. 7,000 ft. white oak bridge plank, 3-in. thick, 16 ft.	J. F. Boylan, Village Recorder
Minnesota	French Lake	March 31	Constructing \$10,000 steel bridge over Crow River	H. C. Brase, Co. Aud., Annandale
Colorado	Denver	March 31	Bldg. 37 ft. rein. concrete span over river at Ouray	T. W. Jaycox, State Engineer
Alaska	Sitka	April 1, noon	Bldg. suspension bridge over Indian River, near Sitka	Lt. Sam C. Orchard, U. S. A., S. Kag'y
Arkansas	Hamburg	April 2, noon	Bldg. 4 steel bridges over Bayou Bartholomew	J. C. Brown, County Judge
New Jersey	Nutley	April 2, 3 P.M.	Repair and alterations, aprons of draw-bridge	R. D. Earle, Hackensack, Co. Engr.
Tennessee	Copperhill	April 3, noon	Bldg. 3 steel highway bridges over different streams in County	B. H. Case, Eng.-in-Charge
Colorado	Silt	April 3	Erecting bridge; new bids; low one, \$12,030	T. W. Jaycox, Denver, State Engr.
British Col'bia	Vancouver	April 4, noon	Manufacture and erection of 2 new bridges over False Creek	Waddell & Harrington, K.C., Mo., C.E.
New Jersey	Salem	April 4, 2 P.M.	Weston Ave., Granville St., East Wt. steel, 2,800 tons	Wm. M. Carter, Woodbury, Engr.
Kansas	Wichita	April 6, noon	Bldg. additional length 14 ft. to draw-bridge and moving back the fixed span 14 ft.	C. N. Cartwright, County Auditor
Washington	Cathlamet	April 6, 1:30 P.M.	County Commissioners	
Minnesota	St. Paul	April 6, 2 P.M.	Constructing wooden draw-bridge over Deep river	Geo. T. Redington, Sec'y Bd. Park Commissioners
New Mexico	Santa Rosa	April 6	Bldg. steel bridge over Pecos River	County Commissioners
Mississippi	Scranton	April 6	Bldg. steel bridge over Dog River; also over Cooper's Mill Creek; also fill and repair approach Ft. Bayou bridge	I. P. Delmas, Clk. Bd. Superv.
Indiana	Valparaiso	April 7, 10 A.M.	Constructing various bridges	Stephen P. Corboy, Co. Auditor
Ohio	Akron	April 7, 10 A.M.	Labor and material for bldg. Kenmore bridge, concrete sub. on piling; steel superstructure, etc.	Mark D. Buckman, Co. Auditor
Indiana	Crawfordsville	April 7, 11 A.M.	Constructing 3 bridges and repairing several others	B. B. Eagle, County Auditor
Nebraska	Nebraska City	April 7, noon	Bldg. steel bridge, 40 to 100 ft. spans, 14 ft. roadway on 30 or 36-in. steel tubes or rein. concrete; also I-beam bridges, 16 to 32 ft. long, and wooden bridges, 16 to 80 ft. long	A. P. Young, County Clerk
Washington	Chehalis	April 7, 2 P.M.	Bldg. 80-ft. steel bridge, 16 ft. roadway on concrete; remove old bridge	Ernest C. Bechly, County Engineer
North Dakota	La Moure	April 7, 2 P.M.	Constructing wood and steel bridges; also furn. cor. galv. metal culverts in 1908, and replanking, etc., bridge over James River	E. W. Field, County Auditor
Ohio	Middletown	April 7	Bldg. new hoist bridge, steel and concrete over Canal at Tytus Ave.; cost, \$14,300, \$800 for sub-structure; also remove old bridge; cost, \$1,424, of which \$424 for sub.	County Com'rs, Middletown
Ohio	Cincinnati	April 7	Bldg. piers, abutments and retaining walls for sub-structure of viaduct for terminal track from 8th to 3d St.	Ward Baldwin, Ch. Engr., Ingalls Bldg.
Ohio	Bryan	April 8, 11 A.M.	Furn. and bldg. 3 sub., \$2,357; \$2,043; \$2,160; 2 super., \$1,692 and \$1,507; also 12 other sub. and superstructures	R. H. Weaver, County Auditor
Alabama	Birmingham	April 8, noon	Furn. mat. and bldg. 8 steel or rein. concrete hwy bridges	P. S. Milner, County Engineer
South Dakota	Brookings	April 8, 2 P.M.	Material and labor for building 28-ft. cement bridge	P. J. Murphy, Co. Auditor
South Dakota	Watertown	April 8, 2 P.M.	Bldg. 50-ft. steel span bridge, 7 ft. above water line, with 12-ft. wing and three 8-ft. wings, tubular piers, concrete-filled, with steel backing	E. I. Lamby, County Auditor
Mississippi	Vicksburg	April 9, noon	Building wooden bridge on Road 19, near Yokena	J. D. Laughlin, Chancery Clerk
South Dakota	Fort Meade	April 10, 10 A.M.	Constructing bridges and culverts, etc.	Capt. L. C. Scherer, Q. M., U. S. A.

Lighting and Electricity

Wisconsin	Loyal	March 26, 2 P.M.	Furnishing 22,000 ft. copper wire No. 8 to 00	J. M. Philpott, Village Clerk
New York	New York	March 30, 11 A.M.	Electrical equipment for 3 public schools	C. B. J. Snyder, Supt. School Bldgs.
Dist. of Col'bia	Washington	March 30, 2 P.M.	Electric lighting features, electric clock system, etc., for new Municipal Building	Jay I. Morrow, Eng'r Com'r
Iowa	Des Moines	March 31, 9 A.M.	Furn. electrical supplies, eng'rs supplies, etc., in 1908	W. W. Wise, Bd. Pub. Wks.
Delaware	Wilmington	March 31, 3 P.M.	Lighting streets by gas and electricity for 5 yrs. from Sept. 1, inc. electrical energy for 350 arc and 428 incan. lamps	Howard B. Griffith, City Engineer

Lighting and Electricity—Continued

Virginia.....	Roanoke.....	March 31.....	Lighting sts., alleys and parks with 250 or more electric arc lights for 5 years from Nov. 1; also for supplying current; also bldg. and equipping superstructure or overhead lighting plant, complete, for city.....	W. E. Thomas, City Clerk.
Indiana.....	Mt. Vernon.....	April 1.....	Lighting streets for 10 yrs., from July 1, 1909 with electric lights, plant to consist of 85 2,000 c.p. enclosed arc lamps; 11 yr. franchise for commercial and residence lighting, 900 with contract.....	Henry Kling, City Clerk. J. M. Ellsworth, Direr. Director Sullivan, B. E. & P.
Ohio.....	Hudson.....	April 1.....	Constructing electric light plant, water works, etc.....	John D. Simpson, Sec'y-Treas. W. H. Jones, City Clerk.
Dist. of Col'bia.	Washington.....	April 6.....	Furn. electrical sup. to Bur. E. & Pr., 1 year from July 1.....	J. J. Nunnally, City Auditor.
Saskatchewan..	Moose Jaw.....	April 6.....	Ext. mun. light and power plant, inc. turbo-alternators and exciters; condensers; pipe work, switchboard; cone.....	J. J. Nunnally, City Architect. Elliott Woods, Supt. Capitol.
Louisiana.....	Lecompte.....	April 7.....	Bldg. electric light plant, to cost \$10,000, steam operated.....	Secretary of each Dept. J. A. Clements, City Recorder.
Texas.....	Fort Worth.....	April 7.....	1,280 c. p. 6.6 ampere a. c. arc lamps, complete, with inner and outer globes; lamps for street lighting, 250, 500 or 750 lamps. Foundation, furnishing, erecting, etc., 650 kw., 3-phase, 60-cycle, 2,300-volt a.c. generator with exciter; 10 current transformers, cap. 100 6.6 ampere arc each; switchboard panels for 20 circuits of 50 arc each; exciter and generator panel; all wiring and pipe-fitting by city; also alternate bids.....	
Dist. of Col'bia.	Washington.....	April 8.....	Panel boards, boxes, pull boxes, etc., for Senate of Bldg.....	
Dist. of Col'bia.	Washington.....	April 15, 2 P.M.	Electrical supplies, surveying instruments, and mis. supplies for various Federal Departments for year end, June 30, 1909.....	
Georgia.....	Lafayette.....	May 1.....	Constructing electric lighting plant.....	

Miscellaneous

Iowa.....	Des Moines.....	March 26, 11 A.M.	Filling land; also completing approach 6th Ave. bridge.....	W. W. Wise, Bd. Pub. Works.
Rhode Island..	Providence.....	March 26.....	Constructing sewerage wharf, west side Providence river.....	W. F. Slade, Com'r Pub. Wks.
West Virginia..	Wheeling.....	March 27.....	Constructing Ohio River Dam No. 8, at Wellsville, O.....	U. S. Engineer's Office.
Washington.....	Brewerton.....	March 28, 11 A.M.	Furn. 2 boilers, flue con. and steel stack, navy yard.....	Commandant, Navy Yard.
New York.....	New York.....	March 30, 10 A.M.	Furnishing 125 bicycles for Police Dept.....	Theo. Bingham, Police Com'r.
New York.....	New York.....	March 30, 11 A.M.	Furn. fire exting. apparatus to schools, Boro Queens.....	C. B. J. Snyder, Supt. Sch. Bldgs.
Dist. of Col'bia.	Washington.....	March 30, 2 P.M.	Furn. metal cabinet work, equipment, etc., new Mun. Bldg.....	H. B. F. Macfarland, Com'r.
California.....	Los Angeles.....	March 30, 3 P.M.	Elevator plant for Federal Building.....	James Knox Taylor, Wash., D. C.
Iowa.....	Sioux City.....	March 30, 3 P.M.	Furn. open type feed water heater, 300 h.p.; also boiler feed pump, 500 h.p.....	G. B. Healy, Pres. W. W. Trus.
New York.....	New York.....	March 30.....	Furn. armature, spikes, plumbers' supplies, etc.....	Allen N. Spooner, Com'r Docks.
Iowa.....	Des Moines.....	March 31, 9 A.M.	Furn. fire hose for city; also engineers' supplies, etc., during yr.....	Geo. F. Poorman, City Clerk.
West Virginia..	Wheeling.....	March 31, 11 A.M.	Furn. 6,500 bbls. Am. Port. cement, Dam 18, Ohio River.....	F. C. Boggs, Capt. Eng'r's, U. S. A.
New York.....	N. Brighton, S. I.	March 31, noon.....	Street sprinkling in Borough of Richmond.....	George Cromwell, Borough President.
West Virginia..	Wheeling.....	March 31.....	Furn. 6,500 bbls. cement at Dam No. 18, near Parkersburg.....	Capt. F. C. Boggs, Eng'r Corps, U.S.A.
Ontario.....	Galt.....	April 1, noon.....	Supplying 2,000 bbls. Portland cement during season.....	Joseph McCartney, Town Clerk.
New York.....	Fort Wood.....	April 1, 2:45 P.M.	Constructing storage dock and timber wharf.....	G. C. Burnell, Q. M., U. S. A.
Ohio.....	Hudson.....	April 1.....	Bldg. water works, light plant and other municipal imp'ts.....	A. A. Augustus, Cleveland, Agt.
New York.....	New York.....	April 2, 3 P.M.	Furnishing grass sods parks, etc., Brooklyn.....	Park Board.
Pennsylvania..	Coraopolis.....	April 6, 7:30 P.M.	Removal of garbage for year beginning May 1.....	Ernest C. Harper, Boro. Clerk.
West Virginia..	Wheeling.....	April 7.....	Constructing Dam No. 11, Ohio river, at Wellsburg.....	Capt. F. C. Boggs, Eng'r Corps, U. S. A.
Dist. of Col'bia.	Washington.....	April 8, noon.....	Electric passenger elevators for U. S. Senate Office Bldg.....	Elliott Woods, Supt. Capitol.
South Dakota..	Fort Meade.....	April 10.....	Constructing drainage ditches, bridges, culverts, etc.....	Capt. L. C. Scherer, Q. M., U. S. A.
Dist. of Col'bia.	Washington.....	April 13, 10:30 A.M.	Furn. 4,500,000 bbls. Portland cement, Circular 420.....	Col. H. F. Hodges, Ist. Canal Com'n.
Dist. of Col'bia.	Washington.....	April 15, 2 P.M.	Hauling ashes year end, June 30, 1909; price per cu. yd., also furn. mis. supplies to various Federal Depts.....	Secretary of each Dept. Argentine Legation, Wash., D. C.
South America.	Buenos Ayres.....	May 1, 2 P.M.	Bldg. 2 underground electric railways, etc.....	St. George Boswell, Ch. Eng'r Har- bor Commissioners.
Quebec.....	Quebec.....	May 1.....	Furnishing 30-ton capacity floating crane.....	
Ohio.....	Columbus.....	May 11, noon.....	Constructing garbage reduction works, cap. 100 tons per 24 hrs., on city land, inc. design, bldg., delivery, etc.....	E. W. Hirsch, Sec'y Bd. Pub. Serv

STREET IMPROVEMENTS

San Francisco, Cal.—About \$600,000 has been made available for repairing streets and sewers, the intention being to have the work done by the time the battleships arrive, May 5.

New Haven, Conn.—The Street Commissioner has petitioned for authority to issue \$100,000 bonds for paving purposes.—C. W. Kelly, City Engineer.

Waterbury, Conn.—Plans have been prepared for improving a portion of Baldwin street.

Wilmington, Del.—The Levy Court will shortly let contract for macadamizing the Lancaster turnpike and the Silverside road, in Brandywine Hundred.

Atlanta, Ga.—Council has decided to widen and pave a portion of North Jackson street.

The Street Committee of Council has approved many street improvements. Side-walks and curbing for the following streets were passed up by the committee: Rice, from Boulevard to Arnold; north side East avenue, from Prospect place to Randolph; on west side Moreland, from McLendon to Euclid; Euclid, from Moreland to Alta; Piedmont, from Tenth to Fifteenth; west side Garden, from Georgia to Glenn. An ordinance was drawn up for the paving with chert Connolly street, Woodward avenue to Richardson street. A resolution was adopted to gutter Cherry street, between Third and Fifth streets. Among other resolutions adopted by the committee were the following: Requesting the Finance Committee to appropriate \$500 to repair streets which cross the campus of the Atlanta University; to repair Peoples street, between Lucile avenue and Gordon street. The committee has decided to ask the Finance Committee for sufficient money to lay sidewalks and curbing on the south side of Sydney street, between Cherokee avenue and Park avenue.—R. M. Clayton, City Engineer.

East St. Louis, Ill.—Council has passed ordinances providing for the paving of portions of Third and Eleventh streets, and Illinois avenue, at a cost of \$34,000.

Freeport, Ill.—Council has decided to pave with brick, North Galena avenue, at a cost of about \$30,000.

Jacksonville, Ill.—Council has passed resolutions to pave 33,608 square yards with brick, North Main, Franklin, East College, Sandusky, West North, South West and North Prairie streets.

Joliet, Ill.—City Engineer H. A. Stevens

is preparing specifications for several miles of cement walks, to be laid this season.

All bids which were received for paving Campbell street with asphalt have been rejected; new bids will be received.

Peoria, Ill.—Council is considering paving portions of East and West Washington streets, at a cost of \$50,000.

Evansville, Ind.—Bids for paving will be received by W. F. Wunderlich, Clerk, Board of Public Works, about April 1.—Jas. D. Saunders, City Engineer.

Fort Wayne, Ind.—The Board of Public Works will receive proposals for the paving of Columbia avenue, in Lakeside; Harrison street, from Grand street to Butler street; Sutenfield street, from Lafayette to Hanna; Leith street, from Hoagland avenue to Hanna street; Walnut street, from Fairfield avenue to Miner street, and Taylor street, from Fairfield avenue to St. Mary's river.

Indianapolis, Ind.—The Board of Works has ordered plans for cement walks, brick gutter and curb in Wright street, from Downey to Cottage avenue; cement walks, curb and approach walks in Highland avenue, from New York to Vermont street, and bitulithic roadway and curb in Euclid avenue, from Washington to Michigan street.

Resolutions have been adopted by the Board for cement walks in north side of English avenue, from Keystone to Oakland avenue; brick roadway in first alley east of Park avenue, from Sixteenth to Seventeenth street; gravel roadway and curb in Moore avenue, from Rural street to Christian avenue; gravel roadway, cement walks and curb in Congress avenue, from Bryan avenue to Dye street, and graded roadway and walks in Dye street, from Thirtieth to Thirty-second street.

Final action was taken by the Board for brick roadway in first alley north of Twelfth street, from Capitol to Senate avenue; brick roadway in first alley east of Park avenue, from Seventeenth to Nineteenth street; brick roadway in first alley west of East street, from first alley south of South street, to point 75 feet south of first alley south of South street; graded roadway, cement walks and curb in Oxford street, from Tenth street to point 1,200 feet south; pipe sewer in first alley north of Twenty-eighth street, from Barnes avenue to point 13 feet west of Annetta street; sewer in Dexter street, from Eighteenth street to point 33 feet south of Twenty-second street; cement walks and curb in DeLoss street, from State avenue to Nelson street; and graded roadway in Cap-

itol avenue, from Thirty-ninth to Fortieth street.

Jeffersonville, Ind.—Bids will probably soon be called for by the Board of Public Works for paving East Seventh street with brick, stone curb and granolithic walks.—Victor W. Lyon, City Engineer.

Morocco, Ind.—The Commissioners of Newton County will soon ask for bids for the construction of five miles of stone road in McClelland and Colfax Townships; estimated cost, \$2,500 per mile.

Mt. Vernon, Ind.—About \$20,000 will be expended for additional new streets and a small sum for sewers.—Geo. W. Sarles, City Engineer; R. L. Sullivan, Jr., City Clerk.

New Albany, Ind.—The Board of Works has decided to pave a portion of Market street with macadam and construct granitoid sidewalks therein.

Keokuk, Ia.—Council has started preliminary resolutions looking to the macadamizing of ten blocks, about 10,000 square yards, and 8,000 lineal feet of 3-foot cement gutter.—J. Ross Robertson, City Engineer.

Red Oak, Ia.—Resolutions of necessity have been published for the construction of a system of streets of combined curb and gutter; also two blocks of brick pavement on Market street.

Lawrence, Kan.—Ordinances have been passed providing for the paving of certain portions of Henry street and West Lawrence street, with brick.—F. D. Brooks, City Clerk.

Covington, Ky.—Council has passed an ordinance providing for the construction of cement sidewalks on a portion of Sixteenth street.

Baltimore, Md.—We are informed that the contract for furnishing vitrified paving block, Mack brand, to City Engineer's Department during 1908 has been awarded to Wm. W. Clarke & Son, 546 East Monument street, for about \$4,500.—B. T. Fendall, City Engineer.

At the request of Mayor J. Barry Mahool, the Commissioners for Opening Streets has completed estimates for the paving of the turnpikes within the city limits. For paving the Frederick, Belair, Harford, Liberty and Reisterstown roads or turnpikes from the points to which they are now paved to the city limits it would cost, according to the estimate, \$1,288,963.50. This does not include the price that would have to be paid to the owners of the turnpikes when they would be deeded to the city.

The estimate shows that it would cost

\$212,512 to pave Harford avenue from North avenue to the northern city limits with a smooth improved pavement, and with granite blocks in the car tracks and two feet on each side of the tracks; with Belgian blocks, \$246,112. If the turnpike were paved according to the specifications on which the estimate is based, a new bridge over Herring Run, which would cost \$75,000, would be necessary. A change in the course of the pike at Herring Run is contemplated in the specifications, which would cause it to be moved northerly through the territory of the Water Department and along some park property. This change would straighten the road at this point.

Liberty turnpike, or Garrison avenue, from Clifton avenue to the northern city limits, would require \$184,895 for a smooth pavement; with Belgian blocks, \$217,695.

For paving Frederick turnpike or road from Bentalou street to the western city limits with smooth pavement and granite blocks in and two feet on each side of the car tracks \$157,735 would be necessary. With a new bridge over Gwynn's Run, costing \$8,000, a new \$100,000 bridge over Gwynn's Falls and a change in the course of the road the total cost with smooth improved pavement would be \$265,735; a Belgian block pavement and the two new bridges would cost \$295,172.

Reisterstown road, paved with smooth pavement from Fulton avenue to the city limits would cost \$218,270; if Belgian blocks, would cost \$269,090.

The estimate for improving Belair road with smooth pavement from North avenue to the northern city limits is \$72,451.50; Belgian blocks, \$86,009. The estimated cost of \$1,288,063.50 includes the new bridges contemplated, which the Commissioners admitted were desirable. Several of the bridges on the turnpikes are said to be still serviceable, but not adequate to the amount of traffic passing over them.—B. F. Fendall, City Engineer.

Pocomoke City, Md.—The Senate has passed a bill authorizing the issue of \$25,000 bonds for street improvements in Pocomoke City.

Haverhill, Mass.—The order calling for a bond issue of \$48,000, of which \$35,000 will be devoted to repairs on the sixteen miles of macadam roads of the city and \$5,000 for sidewalk construction, has been signed by Mayor Wood, and as soon as the conditions of the street permits the Street Department will start in on the repair work, and aside from this there will be much permanent street work accomplished.

Plymouth, Mich.—Bonds, \$8,000 have been voted for paving purposes.—Fred Bennett, President of the Board.

St. Joseph, Mo.—Council has passed resolutions for grading to full width, including sidewalks, Twelfth street, from Monterey to Hickory street, and Grand avenue, from Fifteenth to Eighteenth street; plans, estimates and specifications have been prepared by the Board of Public Works, John B. Ryan, President, for grading, etc., Holman street, from Thirteenth to Twenty-second street.—Wm. E. Spratt, Mayor; Joel E. Gates, City Clerk.

Springfield, Mo.—Council is arranging to improve certain portions of Elm street by paving.

The Springfield Traction Company will expend \$100,000 in paving streets.—Address Secretary.

Auburn, N. H.—The town has voted \$250 for a new road machine; also \$800 for highways, in addition to the amount required by law, making \$1,600 in all.—Lewis G. Shattuck, Town Clerk.

Bath, N. H.—The town has voted \$225 for a new road machine; also \$2,500 for highways and bridges, and to raise the amount necessary to secure State aid for the permanent improvement of highways.—C. W. Jackson, Town Clerk.

Concord, N. H.—Many of the towns at the recent town meetings voted to raise sums necessary to secure State aid for permanent highways.

Northfield, N. H.—It was voted at the town meeting to appropriate \$500 to be used at the discretion of the Selectmen in repairing the stone crusher or purchasing a new one. It was also voted to repair the macadam road from the upper iron bridge to Summer street, and \$250 was appropriated for the purchase of a new road machine.—Harry W. Muzzey, Town Clerk.

Gloucester City, N. J.—There is \$25,000 of the bond issue left to improve additional streets; property owners along the line of King street are already at work trying to get that street asphalted, and it seems to be the general opinion that the street will be improved. There are also other streets in need of improvement.

Jersey City, N. J.—The sum of \$7,580 has been appropriated to repave Bowers street with wood blocks.

Paterson, N. J.—The County Engineer has been instructed to make cross sections of Market street and River road, and specifi-

cations that will set forth clearly places where it will be necessary for work to be done; bids will then probably be called for the work of fixing up the macadam. In this relation representatives of various companies which dispense oil for laying dust on roads have appeared before the Road Committee, and the Freeholders promised to visit nearby places within the next few weeks to learn how the various preparations have worked and which have given satisfaction.

Trenton, N. J.—The paving of Princeton avenue with bitulithic is contemplated.

Poughkeepsie, N. Y.—The Board of Public Works has determined to repave that section of Main street, from the east side of Catharine and Academy streets to the east side of South Clinton street, between the outer rails of the city railroad tracks and the curbs on either side, with Syracuse Standard paving bricks; the existing concrete foundation to be increased in thickness and the bricks laid edgewise thereon with a suitable sand cushion and the joints filled with heated sand, as in Garden street.—R. J. Shields, Clerk.

Akron, O.—Copley road is to be paved a distance of a mile and a quarter west of the city limits; the cost will amount to approximately \$12,000 a mile.—Henry Froderick, President of Local Improvement Association.

Cincinnati, O.—A bond issue of \$528,000 has been authorized by Council to pay for the city's portion of street and sewer improvements. The streets to be improved and the bond issue for each are as follows:

Graded and paved: Juergens avenue, \$600.50; Wunder avenue, \$1,622.50; Renner street, \$2,511; Budd street, \$4,928; Sycamore street, \$22,318; Ehrman avenue, \$9,157.62; Freeland avenue, \$1,977.62; Grace avenue, \$10,491.50; Woodland avenue, \$3,213.50; Dixmont avenue, \$3,849; Cutter street, \$32,941.35; McMillan street, \$17,623; Bank street, \$20,684; Charlotte street, \$1,616.38; Bryant avenue, \$662.50; Naeher street, \$7,955.75; South Auburn avenue, \$2,611.12; East Eighth street, \$3,886.25; Addison street, \$2,644; Lyons street, \$2,490.50; Lawrence alley, \$859.75; Fifth avenue, \$2,730.30; Harrison avenue, \$32,480; Glendora avenue, \$634; Berlin street, \$1,332.87; Mad Anthony street, \$2,785; Dury avenue, \$6,352; Probasco street, \$654.50; Wendel alley, \$1,639.25; Chateau avenue, \$353.77; Harrison avenue, \$77.973; Washington alley, \$171.20; Lang street, \$2,259.14; Chestnut street, \$3,630.60; Avery street, \$1,831.75; McMillan street, \$26,422.22; Ferdinand alley, \$413.27; Fourth avenue, \$510.35.

Resurfaced: Plum street, \$4,824.80; Longworth street, \$1,361.50; Opera place, \$1,472.13; McMillan street, \$6,468.88; Post Square, \$1,501.75; Shillito place, \$1,059.50; George street, \$5,102.47; Kemper lane, \$7,468; Park avenue, \$9,249.65; York street, \$6,065.75; John street, \$25,364.05; Gilbert avenue, \$21,348; Eighth street, \$3,837.90; Auburn avenue, \$19,282.25; Ninth street, \$12,267.25; Grant street, \$50; Bank street, \$715; Locust street, \$1,500; Josephine street, \$1,075; Ninth street, \$1,840.15; South Court, \$1,062.47; Fairfield avenue, \$5,676; Garfield place, \$3,867.45.

Dayton, O.—Bids will soon be asked for paving the Ludlow, Clinton, McDonough, Bacon, Jackson and Montgomery streets, about 25,200 square yards, with brick, sheet asphalt, bituminous, macadam or creosoted wood block.

Lancaster, O.—Clerk Nothacker states that the ordinance to pave Pearl avenue and Zane alley has passed Council, and that these improvements will be made.

Lorain, O.—Tenth avenue, from Penfield avenue to the Thew shovel works, is to be macadamized at once; the Service Board has instructed the Clerk to advertise for bids.

Marion, O.—Bids will be received, April 7, for the purchase of \$10,550 4½ per cent. street improvement bonds.—Harry S. Elliott, City Auditor.

Mt. Gilead, O.—Council has passed two ordinances providing for laying pavement of a number of streets, and has instructed City Engineer Buck to prepare plans for these improvements.

Springfield, O.—Estimates have been submitted to the Board of Public Service for repaving of Fountain avenue, between Washington and High streets, also for a similar improvement between Washington and Jefferson streets.

Council has decided to pave both Kenton and Burt streets; the engineer will draw the plans and bids will be invited.

Bids will be received April 14, 8 p.m., for \$25,000 4½ per cent., semi-annual street improvement bonds.—L. M. Harris, City Clerk.

Toledo, O.—J. H. Horan is low bidder on the construction of 60,000 square feet of concrete sidewalks aggregating \$6,300. W. W. Hummel has the contract for the stone flagging at his bid of \$18,000.

Zanesville, O.—The Frazeyburg road will be paved for a mile from the city line and will afford one of the most beautiful drives about the city. The Board of Public Service

has under consideration the improvement of many other streets, and the coming summer ought to see many more miles of paved streets added to the city's present twenty-four miles.

Oklahoma, Okla.—Council has passed a resolution providing for the paving of portions of Park place, Dale avenue, Eleventh street and Thirteenth streets.

Portland, Ore.—The paving of portions of East Third and East Twelfth streets is contemplated at a cost of \$19,525.

Altoona, Pa.—In all probability the specifications for the new batch of paving will not be ready for advertising before Council reelects a new City Engineer. The Board of Public Works has been urging haste in the preparation of the data and other things necessary to advertise for bids, but City Engineer Engstrom is not yet ready.

The city does not look for a large number of bids for extensive paving contracts, which it is proposed to award the coming season, on account of the system whereby the property owners pay two-thirds of the cost and are given ten years to pay many contractors, being of the opinion that municipal bonds are difficult to dispose of at this time.

Lansdowne, Pa.—An ordinance has been introduced, asking for a special election for authority to borrow \$30,000, one-half to be used for paving Baltimore avenue with vitrified brick, the other half for street repairs.

Manorville, Pa.—Manorville borough people want their front street paved or macadamized. Surveyors, working under the State Highway Department, are now surveying it for that purpose. When the Garrett's Run road is built, and the cut-off under the railroad is made, it is expected that the main street of the borough will also be paved.

Scranton, Pa.—Ordinances have passed Council for paving Seventh, Railroad and Fourth avenues, Sanderson avenue, from Larch to Green Ridge streets; Larch street, from Capouse to Sanderson avenues, and Division street, from Main to Hyde Park avenues.—O. B. Partridge, Chairman.

Waynesboro, Pa.—The County Commissioners forwarded to the State Highway Department at Harrisburg petitions for the paving of the Oak Forest road, in Center Township for a distance of three miles, and the Mt. Morris road in Franklin Township for the same distance; some time ago the Commissioners petitioned the State Highway Department to macadamize these two pieces of road, and since that time the officials have decided that paving the roads with brick would be better and cheaper, as the cost of repairs on the improved roads already constructed in the county has been very great.

Nashville, Tenn.—Bids will be received April 15 for the purchase of \$125,000 4½ per cent., 30-year street improvement bonds; at the same time bids will be received for the purchase of \$200,000 4 per cent., 20-year water supply bonds.—H. S. Bauman, City Recorder.

Paris, Tex.—The citizens have voted \$50,000 bonds for street improvements.

Salt Lake City, Utah.—The Board of Public Works opened bids as follows for paving (a) First South street and (b) Pierpoint street: P. J. Moran, Utah asphalt (a) \$228,865, California asphalt (a) \$181,285, (b) \$10,579, and Campbell Building Company (b) \$11,756, five-year guarantee given on each.

Petersburg, Va.—Council has appropriated \$8,208 for the paving of a portion of Washington street.

Portsmouth, Va.—The Senate has passed a bill authorizing the Board of Supervisors of Norfolk County to issue \$200,000 bonds for road improvements.

Roanoke, Va.—The city and county authorities are contemplating the construction of five miles of macadam roads, extending for half a mile outside of the corporate limits; the State and county to build roads outside of city and the city to build roads inside of city; the city will have equally as much road to build as the State and county.

Seattle, Wash.—R. H. Thomson, City Engineer, has reported upon the following local improvements, giving the estimated cost as follows: Eighteenth avenue, Northwest, and other streets, concrete sidewalks, \$17,900; West Seventy-third street and other streets, grading, \$8,800; Madison street, repaving with sandstone blocks, \$3,000; Thirty-second avenue and other streets, grading, etc., \$22,700; Thackeray place and other streets, concrete walks, \$10,000.

Spokane, Wash.—Ordinances were passed for the following improvements: Curbing, parking, ballasting, sidewalking and resurfacing of Seventh avenue, from Monroe to Howard streets; grading, curbing, parking and sidewalking of Spofford avenue, from Ash to Belt streets; grading, curbing, parking and sidewalking of Mission avenue, from South Riverfront to Stone streets; paving First avenue from Washington to Bernard streets; sewer in the alley between Gardner

and Dean avenues, from Eln. street to a point 280 feet west of Chestnut street; side-walking Adams street, from Second to Fourth avenues; establishing a grade on Twentieth avenue, from Grand to Hatch streets; establishing a grade on Twelfth avenue, from Crestline to Pittsburg streets; re-establishing grade on Sprague avenue, from Ivory to Napa streets; establishing grade of Hilliard street, from Sprague to Pacific avenue; establishing grade on Pacific avenue, from Division to Sherman streets; re-establishing grade on Sherman street, from Sprague to Third avenues.

Janesville, Wis.—The question of macadamizing Racine street, from Main to Logan street, is under consideration.—C. V. Kerch, City Engineer.

Edmonton, Alta, Can.—The ratepayers have voted in favor of raising \$130,000 in addition to the \$121,000 already voted for the construction and paving of streets.

Hamilton, Ont., Can.—The Civic Public Works Department has decided upon spending \$250,000 this year on permanent road building.—W. R. Leckie, Clerk.

SEWERAGE

Knightstown, Ind.—The town will construct two miles of sewer this summer.

Princeton, Ind.—Plans and specifications have been prepared by F. E. Watts, C. E., for the construction of a sanitary sewer system; estimated cost, \$70,000.

Kansas City, Kan.—R. L. McAlpine, City Engineer, is preparing plans for four vitrified pipe district sewers; estimated cost, \$10,000; bids will soon be asked.—D. E. Cornell, Mayor.

Takoma Park, Md.—Mayor W. G. Platt has proposed a plan providing for reciprocal sewer facilities between Takoma Park, D. C., and Takoma Park, Md., and the Citizens' Association of the Washington suburb have urged upon the Commissioners of the District of Columbia favorable action in the plan.

Cambridge, Mass.—Council has passed ordinance providing for a separate sewer system.

Greenfield, Mass.—Dr. F. H. Zabriskie and George F. Merrill are on a committee appointed to investigate the question of a filtration plant to prevent pollution of Green River by sewage.

Lawrence, Mass.—A loan of \$20,000 has been authorized for the construction of sewers in Ward 1, and an order for the commencement of work has been adopted.—C. Corcoran, City Clerk.

The Board of Aldermen has passed an ordinance providing for the issue of \$15,000 bonds for constructing a section of the sewer system on east side of Prospect Hill.

Winchendon, Mass.—Estimates are being prepared for sewer system to cost \$25,000.—Address Town Clerk.

Monroe, Mich.—At the coming election the voters will have a chance to vote on bonding the city for at least \$60,000, of which at least \$50,000 will be used in building trunk sewers on each side of the river and the remainder for the electric lighting plant. The recent flood makes the sewer proposition sure to carry.

Norway, Mich.—Council has decided to construct a trunk sewer.

Pontiac, Mich.—Bids will probably be called for in about two or three months for the proposed trunk sewer, to cost about \$12,000.—William J. Fisher, City Engineer.

Forsyth, Mont.—Henry Gerharz, of Billings, has been selected to prepare plans for a sewerage system for Forsyth.

Exeter, N. H.—The petition of Gen. S. H. Gale for the town to construct a tile drain and cover what is known as the Seminary pond was considered at the town meeting, and it was finally voted to appropriate \$500 for the purpose. Three articles in regard to sewers were passed. These were put before the meeting by E. G. Eastman, William Hutchins and Edwin S. Hersey.—Fred S. Fellows, Town Clerk.

Newmarket, N. H.—Article 8, to see if the town will sell the town farm at public auction for a sum not less than \$3,000 and use the money to establish a sewerage system, was adopted after much discussion at the town meeting.—Matthew T. Kennedy, Town Clerk.

Schenectady, N. Y.—Bids will be received at the Comptroller's office until 11 a. m., April 11, on \$180,000 worth of 4½ per cent. sewer bonds of the City of Schenectady. The bonds will be for \$1,000 each, and will draw 4½ per cent interest, payable semi-annually.

Weldon, N. C.—W. W. Wiggins, Chairman Streets, Roads and Parks Committee, Chamber of Commerce, wants to correspond with engineers and constructors relative to installation of sewerage system and waterworks.

Cambridge, O.—O. M. Hoge, City Engineer, has been directed by Council to prepare plans for a sanitary sewer on Wall avenue, from North Third to Foster avenue.

Cincinnati, O.—Sewers will be laid in the following streets, to be paid for from the

\$528,000 bond issue: Ehrman avenue and Norwich avenue sewer, \$4,833.78; Tafel street, \$1,715.15; Denham street, \$1,223.05; Fairview avenue, Westview avenue and Herman street, \$878.08; Burgoyne street \$673.67; Delta avenue and Golden avenue sewer, \$1,593.50; Dhonau street, \$478.85; Irving street, \$553.92; Nevada street, \$2,551.48; Fairmount avenue, \$808.66; Bard alley, \$775.95; Corbett street, Niles, Willis and Halpin, \$3,631.68; McMillan street, \$3,159.40; Stanley avenue, \$2,143; Gilpin avenue and Durrell, \$1,619; Drake avenue, \$64.14; Borden street, Edgewood, Hoffner and Powers street, \$5,558.14; Fisher avenue, alley east of it, Collins avenue, alley east of it, and Herron avenue, Powers street, unnamed street south of Powers street, and Roll avenue, \$28,049.65; Jonathan avenue, Woodburn, \$1,267.40; Ravine, east of Montgomery road, to connect with sewer at Duck Creek, \$3,366.40.

Columbus, O.—Council has voted to issue bonds for the construction of the Sullivan avenue main trunk sewer, on the West Side, as advertised by Councilman Chris Ross, of the Ninth Ward; ordinance introduced by Councilman Heintz to issue bonds for Markeson avenue main trunk sewer, and one providing for the Poplar avenue relief sewer also passed.

Conneaut, O.—It is now a certainty that proper sewers will be constructed on Mill and Chestnut streets; the ordinances providing for this work have been placed on final passage. A number of ordinances were placed on their second readings, including one to proceed with the construction of a sanitary sewer from Liberty to State streets; to proceed with the improvement of West Main street by curbing, draining and paving the same; to establish curb lines on West Main street, from Liberty street west.

Girard, O.—Village Council has instructed Village Clerk E. L. Houser to advertise for the construction of a number of sewers and to change the site of the sewage disposal works.

Mingo Junction, O.—Bids are invited for 1,950 feet 8-inch and 1,350 feet 6-inch sewer of either concrete or reinforced concrete.—S. E. Floyd, City Engineer.

Niles, O.—Auditor Hogan states that a \$20,000 bond issue has been decided on for the building of sewers this spring.

Oberlin, O.—The proposition to bond the town for \$16,000 for the construction of the sewer disposal plant has passed Council.

Oxford, O.—Another election is to be held to decide whether or not Council shall issue bonds for the construction of sewers; the trustees of Miami University have applied to the State Legislature for \$10,000 as their cost of putting in the sewer.

Sandusky, O.—Plans and estimates for the new sewer system have been submitted by Engineer King; to cost \$33,000.

Sellwood (Portland postoffice), Ore.—D. W. Taylor, City Engineer, Portland, has prepared new plans for the construction of a sewer system for this town.

Springfield, O.—Bids will be received April 14, 8 p. m., for \$2,000 Main street and \$2,300 Kenton street and Central avenue storm water relief improvement bonds, 5 per cent. interest, payable semi-annually.—L. M. Harris, City Clerk.

Chartiers, Pa.—The Commissioners of the Township have decided to issue \$25,000 bonds for installing a sewer system in East Carnegie and other points in the township.

Millin, Pa.—The sewer system is inadequate and the Board of Health and township authorities are anxious to have improvements made at once.

Yeaddon, Pa.—The Borough Council has authorized plans for a sewage purification system, to include septic tanks and filter beds; cost, \$150,000.—Albert S. Demon, Borough Engineer.

Bennettsville, S. C.—Fred. Minshall, of Abbeville, has completed plans for the proposed sewerage system.

Chattanooga, Tenn.—Council is considering the construction of a cross-town sewer; a committee from the South Side Business League, headed by Chairman Slayton, appeared before the Board of Works and urged the construction of the proposed sewer before mosquito time.—Chairman Van Dusen, B. P. W.

Nashville, Tenn.—The Trustees of the Central Hospital for Insane are considering the question of disposing of hospital sewage.

Wichita Falls, Tex.—The State Attorney General has approved an issue of \$24,000 sewer bonds.

Cleburne, Tex.—The Cleburne Sewer Company has purchased site near the city and will put in extensions to the sewer system estimated to cost \$35,000.—Address Secretary.

Mt. Vernon, Wash.—Dunn & Dunn, Alaska Building, Seattle, have been selected to prepare plans for a sewerage system to cost about \$16,000.

Jefferson, Wis.—City Engineer Parsons has completed plans for sewerage system.

WATER SUPPLY

Birmingham, Ala.—Council has called an election, April 20, on issuance of \$5,000,000 bonds for construction of light and water plant on the Warrior River; Greater Birmingham would assume the indebtedness.—J. H. Berry, Mayor.

Lodi, Cal.—Council has selected a site for the purpose of establishing water system.

Los Angeles, Cal.—Bids will probably soon be asked by the Department of Public Works for the construction of an eighteen-mile-section of the aqueduct from Jawbone Canyon to Pinto Station, to cost about \$1,500,000; construction of this section will require the driving of eight tunnels through rock, seven miles in length; 2½ miles of open conduit will be cut in rock or varying hardness; 7 steel flumes, of an aggregate length of 2,080 feet, will be built; 3 siphons will also be built, one 400 feet long, a second 650 feet, and the other 3,840 feet. The three siphons will be constructed of riveted steel pipe of a thickness varying from ¼ inch at top to ¾ inch at bottom; the pipe will be 9 feet diameter and will have a 450-foot head; the longest tunnel in this section will be 6,000 feet.—William Mulholland, Chief Engineer, Aqueduct Department.

San Francisco, Cal.—Plans for the auxiliary high-pressure fire protection water system, submitted to the Board of Public Works by City Engineer Monson, have been approved, and this finding forwarded to the Board of Supervisors, which has under consideration the submission to the people in May of a \$5,200,000 bond issue to put the plans into effect.

Yuba City, Cal.—Council will purchase the present water system or build a new system.

Croton, Conn.—The Warden and the Board of Water Commissioners are considering the purchase of a new pump.

Alachua, Fla.—The city proposes to build electric light plant and water works.—E. E. Bell, Mayor.

Athens, Ga.—An election will be held April 15 to decide the question of issuing \$35,000 bonds for improving water system; bonds to bear interest at 4 per cent. and run thirty years.

City Engineer Barnett has prepared estimates for improvements to be made for the extension of the water works system.

Barnesville, Ga.—An election will be held March 26 to vote on the question of issuing \$25,000 electric light and water bonds.—T. W. Cockran, Mayor.

Macon, Ga.—The Macon Gas Light and Water Company have decided to clean the Tufts Springs and repair the pumping station so as to get 1,500,000 gallons a day from that source.

Centralia, Ill.—Council has decided to expend about \$20,000 in water works improvements.

Michigan City, Ind.—City Engineer Erickson of Chicago has conferred with Mayor Miller, Water Works Superintendent Henry Schreiber and others relative to the proposed new intake for the water works, and to preparing plans and estimates.

Anamosa, Ia.—Council is preparing to build a new water plant or to purchase the one owned by private parties.

Mason City, Ia.—Estimates are being prepared for extending water mains in certain streets.

Pella, Ia.—Council is investigating the matter of securing a greater water supply for the city.

Monroe, Ia.—The city will increase capacity of electric light plant and water works.

Pineville, La.—An election will be held, April 9, to vote on the question of issuing \$7,500 bonds for the establishment of water system.—Address City Clerk.

Ft. Scott, Kan.—It is proposed to build a 2,000,000-gallon concrete settling basin, to cost between \$10,000 and \$15,000.

Kirwin, Kan.—Council has appointed a committee to investigate the cost of establishing a water system.

McPherson, Kan.—An election will be held, April 7, to decide the question of city ownership of the light and water plant.

Baltimore, Md.—The legislative bill providing for a new reservoir for the city, to be located in Baltimore County, has been passed by the House and will probably secure favorable consideration by the State Senate.—J. Barry Nichol, Mayor.

New Windsor, Md.—The Legislature has passed bill authorizing this town to construct water works, but nothing definite has been done in the matter; probable cost, \$20,000.—J. Edw. West, Town Clerk.

Lawrence, Mass.—Arthur D. Marble, City Engineer, has completed estimate of cost of covering one section of the old filter at \$50,000.

Ann Arbor, Mich.—New bids will probably be called for in April for the construction of about three miles of 8 and 10-inch pipe sewers.—E. W. Groves, City Engineer.

Bessemer, Mich.—The question of issuing \$25,000 bonds for water works will be submitted to a vote of the people.

Grand Rapids, Mich.—Council has passed an ordinance providing for the issue of \$350,000 bonds for water mains and flood protection.—Address City Comptroller.

Negaunee, Mich.—Arrangements are being made to extend water mains a distance of two miles.

White Bear, Minn.—Council has decided to expend \$8,000 in extending water mains.—Address City Clerk.

Burlington, N. J.—Council has decided to install gravity filters at a cost of \$50,000.

Trenton, N. J.—The Water Commission has decided to build a larger intake pipe at the station. Probably a concrete tunnel, 48 inches in diameter, will be built from the well out into the river. The present intake is 24-inch iron.

Trenton, N. J.—The State Water Supply Commission has refused the application of the Passaic Water Company to build the Kikeout reservoir near Butler and divert water therefrom. The Passaic Water Company owns the property where the reservoir would be built. The city of Newark has applied to the Commission for permission to acquire the site for a watershed for Newark.

Fifteen bids were received for \$50,000 4 per cent., thirty-year bonds for the Trenton Water Department by City Treasurer W. J. B. Stokes, the highest bidder being Ferris & White, of New York, whose offer was \$104,444, and the bonds were awarded to that firm; the price obtained by the city for the bonds is slightly better than that paid recently for the \$50,000,000 bond issue in New York City. The bonds were authorized by Council to provide funds for the new auxiliary pumping station and the completion of the ascending main.

Roswell, N. M.—Burns & McDonnell, Scarrett Building, Kansas City, Mo., are preparing plans and specifications for municipal water works plant, to cost \$120,000; sewers, to cost \$35,000; street improvements, \$10,000, and Fire Department, \$5,000; bonds for this work are to be sold April 15; water supply from artesian wells.

Northfield, Neb.—A committee, including J. E. Smith, W. S. Hill and E. R. Gale, was appointed to investigate the matter of securing flowage and drainage rights on the brook crossing Park street, and construct a dam on said brook for the purpose of storing water to flush the Park street sewer.—Harry W. Muzzey, Town Clerk.

Wahoo, Neb.—An election will be held, March 27, to vote on the question of issuing \$50,000 bonds for building light and water system.—Address City Clerk.

Aztec, N. M.—The question of constructing a gravity water works system is under consideration.

Middletown, N. Y.—The Board of Water Commissioners has voted to construct a larger clear well, to cost \$15,000, at the filter plant; the voters will pass on the question at the spring election.

Oswego, N. Y.—A proposition to issue \$273,000 bonds for the installation of a water supply from Lake Ontario was adopted by a vote of 1,420 to 628, at a special taxpayers' election.

Poughkeepsie, N. Y.—The Board of Works will probably order the laying of water mains in Taylor avenue and Livingston street.

Troy, N. Y.—All estimates and recommendations for gas and electrical fixtures for the new Beman Park house were presented to the Board of Contract and Supply and referred to the Commissioner of Public Works; the work will be paid for from the funds realized by bond issue.

Grand Island, Neb.—W. K. Parker of Kansas City, Mo., has prepared plans for improving the pumping station and extending water mains.

Bryan, O.—An ordinance has been passed authorizing an issue of \$10,000 bonds for improving light and water plants.

Collinwood, O.—Council has passed an ordinance providing for an issue of \$350,000 bonds for improving water system.—Address City Solicitor Baker.

Cleveland, O.—With \$185,000 of the \$450,000 to be raised for the water works, piping will be laid all over the city this year. South Brooklyn is to be paid \$15,000 for piping laid before the village was annexed. The balance is to go for 1909 construction.—E. W. Bemis, Superintendent.

Portsmouth, O.—Engineer S. P. Baird has made a report on the city pumping station and has made extensive recommendations for improvements, including the installation of a new steam supply for the pumps, also the cleaning out of the large reservoir in front of the pumping station so that it can be used as a source of water supply; the installation of a mechanical filter plant of modern design costing \$100,000; the reinforcing of the present pipe system at a cost of \$30,000, and a number of other important and expensive improvements.

Zanesville, O.—The Board of Public Service has decided to remove the three-inch water main on Convers avenue from Findley to Zane avenues and substitute therefor a six-inch main.

Henrietta, Okla.—Plans are in preparation for water works; estimates not yet completed.—Burns & McDonnell, Scarritt Building, Kansas City, Mo., Engineers.

Butler, Pa.—The Butler Water Company is putting in new boilers, filtering plants, etc., at a cost of \$50,000.

Franklin, Pa.—Mayor John P. Emery has called a special election for April 14 to vote on the question of the city's purchasing the water plant; it is proposed to issue bonds for \$260,000.

Ligonier, Pa.—The voters will express their desires at a special election, April 11, on the question of increasing the indebtedness of the borough \$40,000 for enlarging the borough water mains, providing for a 12-inch main through the central portion of the town from the reservoir in Ligonier township. It is claimed that the voters of the town are overwhelmingly in favor of the movement.

New Cumberland, Pa.—The Riverton Consolidated Water Company will erect a \$50,000 reservoir near New Cumberland in order to supply a number of towns in the upper end of the county. The new reservoir will hold 50,000,000 gallons, and will have a pressure of 50 pounds.

Oil City, Pa.—A high pressure line is to be built from the pumping station across the city to the hilltop and the tanks on Hasson Heights at a cost of \$12,000 or \$13,000; at the present time a line extends from the pumping station to Hone avenue, but it is not satisfactory; a concrete lining, with asphalt filler, is also to be placed in the reservoir, cost \$5,000; much of the 4 and 6 inch pipe lines, which have been in use since the plant was installed years ago, are also to be replaced; there is a surplus fund of \$23,000 to pay for the improvements.—Alfred Smedley, B. H. Carnahan and George W. Roess, Water Board.

York, Pa.—The Riverton Consolidated Water Company will erect a \$50,000 reservoir near New Cumberland.—Address Secretary of the Water Company.

Denison, Tex.—The Attorney General has approved of an issue of \$125,000 water bonds.

Hereford, Tex.—Council is considering the question of constructing water works.

Port Arthur, Tex.—The Port Arthur Water Company will purchase engine and generator.—J. A. Young, Manager.

Chehalis, Wash.—Council is considering the question of constructing a gravity water system; it is proposed to bring the water from the north fork of Newaukum River, about fifteen miles east of city.

Lynden, Wash.—Fuller & Manley, of Tacoma, are preparing plans for water works, to cost about \$15,000.—D. W. Bender, Town Clerk.

Puyallup, Wash.—Council is preparing to secure additional water supply.

Kimball, W. Va.—The citizens have voted \$5,000 water bonds.

Beloit, Wis.—The Beloit Water, Gas and Electric Company has decided to install water meters.

Bruce, Wis.—Bids will be received, March 30, for the purchase of \$7,800 5 per cent. water and light bonds.—W. A. Blackburn, Chairman of Board.

La Crosse, Wis.—City Engineer Bradish has prepared plans for new intake pipe for water system; estimated cost, \$50,000.

Sheridan, Wyo.—Bids will be received, April 20, for the purchase of \$250,000 5 per cent. water works bonds.—C. W. Sheldon, City Clerk.

LIGHTING AND ELECTRICITY

Russellville, Ala.—Council is considering the matter of establishing a municipal lighting plant.—Address City Clerk.

Mulberry, Ark.—A company has been organized to be known as the Mulberry Ice and Light Company, with a capital of \$10,000 and will build an ice factory and light plant.

Chicago, Ill.—The People's Gas, Light and Coke Company has purchased site for erecting a gas manufacturing plant.

Ellwood, Ind.—The natural gas supply has failed; it is proposed to establish an artificial gas supply.—Address H. P. Carpenter.

Franklin, Ind.—T. O. Ballard, 800 East Jefferson street, has secured an electric light franchise for a period of twenty-five years and is figuring on two gas producer units of 150 kw. each, A. C. current.

Hartford City, Ind.—The Hartford City Electric Light Company proposes to purchase additional machinery.

Sullivan, Ind.—A. S. Courtright has decided to petition Council for a franchise for lighting streets and residences.

Houma, La.—An appropriation of \$6,000 has been made for electric light plant.—Address Mayor.

Monroe, La.—Council has decided to increase the capacity of the electric light and water works plants by the addition of a 600-

h.p. engine, 40-kw. generator, two 300-h.p. boilers, an electric pump and all necessary connections and appliances.

Opelousas, La.—Council is preparing to enlarge electric light plant.—T. E. Jones, City Electrician.

Weir (Taunton postoffice), Mass.—The citizens contemplate installing electric lamps in place of the naphtha lamps now in use.—Abner Coleman is Manager municipal lighting plant, Taunton.

Baltimore, Md.—The House has passed a bill authorizing \$1,000,000 stock for Baltimore city's conduit system.

Baltimore Light, Heat and Power Company has applied for incorporation with \$100,000 capital stock to furnish electricity for lighting and operating steam heatin, refrigerating and cold storage plants in conjunction with Baltimore Refrigerating and Heating Company.—Richard B. Fentress, President.

Hartford, Mich.—H. L. Gleason is Chairman of a committee appointed to investigate question of constructing municipal electric light plant.

L'Anse, Mich.—The village has secured a site on Fall River for a power and lighting plant.

St. Peter, Minn.—Council is considering the purchase of a new generator and making repairs to the power house.

Swanville, Minn.—J. C. Rose, of Fergus, Falls, is reported to have in contemplation the development of water power for electrical purposes.

Gulfport, Miss.—Gulfport and Mississippi Traction Company will expend \$120,000 for new machinery to increase capacity by 1,500 kilowatts; new equipment to include turbine dynamo.—Address Secretary.

Cassville, Mo.—The Cassville & Western Railway Company is preparing to build an electric power house.—S. W. Mitchell, president.

Trenton, Mo.—The Board of Public Works proposes to establish a municipal lighting plant.—Address C. A. Foster.

Wahoo, Neb.—An election will be held, March 27, to vote on the question of issuing \$15,000 bonds for a municipal light system.

Concord, N. H.—The Concord Electric Company has decided to erect a steam power plant at Sewalls Falls to be used as an auxiliary to the water power plant. The present plan is to move the equipment from the Bridge street station to Sewalls Falls and to install new boilers, a two-stage Curtis steam turbine and auxiliary apparatus. In addition to this plant the company will maintain the street railway plant at West Concord, and will have recourse to the steam plant at the Boston and Maine Railroad Company's shops.—George B. Lauder is Superintendent, Concord.

Exeter, N. H.—The article by A. J. Herrick to appropriate a sum not exceeding \$500 for equipping the Town Hall with electricity was left by the town meeting with the Selectmen for action.—Fred S. Fellows, Town Clerk.

Henniker, N. H.—The town meeting has voted to renew the contract with the Hillsborough Electric Light and Power Company to light streets, and to extend the line to C. A. Wilkins's mill, and \$800 was raised for that purpose.

Newmarket, N. H.—A committee composed of A. C. Haines, W. W. Durrell, S. H. Greene, John Walker, George O. Hodgson, was appointed at the town meeting and instructed to act with the Selectmen and make a contract for one year at \$2,400, or make one for five years at \$2,000 per year, with the Newmarket Electric Light, Power and Heat Company.—Matthew T. Kennedy, Town Clerk.

Tilton, N. H.—The Town Board is discussing the matter of securing improved electric lighting.—Address Town Clerk.

Asbury Park, N. J.—Harry J. Rockafeller, of Sunset Hall, has applied to the Council for a franchise to construct and operate an electric light and power plant and to furnish light and power to the city.

Princeton, N. J.—A committee has been appointed to investigate the feasibility and cost of installing a municipal electric light plant.

Alamogordo, N. M.—Merrill H. Fisher is preparing plans to construct a power house 120x36 feet; there will be a boiler room, 30 x23 feet, and an engine room 33x50 feet; the building, exclusive of machinery, will cost \$5,000.

Buffalo, N. Y.—Plans are being considered for the construction of a municipal conduit system. It is proposed to appropriate \$100,000, of which \$20,000 will be used at once, when available, to take possession of the space to which the city is entitled in the conduits used by the Cataract Power and Conduit Company. The remaining \$80,000 will be used to make the connecting links in the conduits so that a more comprehensive system may be begun and through which the city buildings and streets may be lighted at a much lower rate than is now being paid to the General Electric Company.—Francis G. Ward, Commissioner of Public Works.

Chatham, N. Y.—The Chatham Electric Light, Heat and Power Company is making arrangements to establish a power service for Chatham and vicinity, and will install a 200-h.p. boiler soon; the company plans to extend its transmission lines from Ghent to the village of Philmont, a distance of six miles, to furnish electricity for lighting.—J. F. Wilson, Superintendent.

Schenectady, N. Y.—Plans are being prepared by the executive committee of the Schenectady Illuminating Company for the removal of the Dock street plant, which is now being used jointly with the Schenectady Railway Company as a substation, and for erection of a new and larger plant on the site of the Mohawk Gas Works on South Centre street.—C. S. Van Dyke, Superintendent.

Belle Center, O.—The Village Council will expend \$5,000 for repairing and refitting the municipal electric lighting plant.

Cleveland, O.—It is proposed to purchase a 1,000-k.w. unit for municipal electric light plant.

Girard, O.—L. R. Benjamin, editor of the Girard "Journal," is interested in the construction of a municipal water works and electric light plant, and would be glad to receive information.

Lima, O.—Council has accepted plans prepared by E. R. Young of Toledo, O., for municipal lighting plant; \$80,000 bonds have been authorized.—Address City Clerk.

Rocky River, O.—The Rocky River Water, Light and Power Company, Rocky River, contemplates installing new dynamos in its plant for the purpose of lighting the town.—A. E. Stein, Superintendent.

Duquesne, Pa.—The stockholders of the Duquesne Light Company have decided to make improvements; the plans contemplate a large central station to be located on the water front, and the present plant in East Liberty will be utilized as a sub-station; estimated cost of new station, \$4,000,000.—George H. Webb, President; E. W. Paul, Chief Engineer.

New Castle, Pa.—The Pennsylvania Light and Power Company, Allegheny, Pa., will rebuild the plant destroyed by fire.—J. E. Williamson, Allegheny, Superintendent.

Providence, R. I.—The Blackstone Valley Gas and Electric Company has been incorporated with a capital of \$3,000,000; the company has the right to do business in any town in the County of Providence.—John A. Arnold, Charles E. Ballou and Alfred M. Coats, Incorporators.

Mitchell, S. D.—The Mitchell Illuminating and Power Company will extend and improve the electric light plant and install new machinery.

Corpus Christi, Tex.—The City Council has granted a gas franchise to C. H. Pattison.

Marble Falls, Tex.—Granite Manufacturing Company has organized and expects to develop 4,000 horse power for transmission by electricity; cost of dam estimated at \$65,000; cost of power house not yet estimated.—W. W. Majors, Midlothian, President.

Yoakum, Tex.—Philip Welhausen is interested in a company organized to establish an electric light plant; it is proposed to secure power from the river eight miles from this city.

Ogden, Utah.—The waters of Willard Canyon, about fifteen miles north of Ogden, which are considered valuable for power purposes, have been purchased by M. S. Browning and J. M. Browning, who contemplate the expenditure of about \$50,000 in bringing all the waters into one stream, and the erecting of a power plant on the property to be equipped with the most modern machinery for generating electricity, which will be transmitted to Ogden City for lighting and power purposes.

Salt Lake City, Utah.—The Utah Light and Railway Company, L. L. Dagrow, Engineer, has completed plans for a new power plant at Devil's Gate, in Weber Canyon, to cost about \$350,000.

Alexandria, Va.—The Citizens' Improvement Association of Jefferson District, Alexandria County, at a meeting at the Del Ray School, decided to adopt electricity for lighting purposes in the district; over five-sixths of those present pledged themselves to install electricity in their dwellings.

Seattle, Wash.—The Seattle Electric Company is planning to expend \$1,500,000 for line improvements, extensions and equipment in Seattle during the year; it is planned to enlarge power plant at Georgetown and preparations will also be made for the Alaska-Yukon Exposition which will necessitate many miles of additional trackage.

Chilton, Wis.—The voters will, at the coming spring election, decide whether the city shall own and operate its electric lighting plant.

Hudson, Wis.—The city will install a gas plant.

Juneau, Wis.—W. G. Kirchoffer, Vrooman Building, Madison, is preparing plans for a two-story power house for this city.—F. J. O'Neil, City Clerk.

Hamilton, Ont., Can.—P. W. Sothman has been commissioned to draw up plans for a municipal electric lighting plant; the city has for some time been considering a proposition of purchasing power from Niagara Falls, instead of constructing its own plant.

Nelson, B. C., Can.—Engineer Cecil B. Smith, of the Hydro-Electric Commission, has recommended adding another unit to the municipal power plant at Bonington Falls, work on which, it is said, will soon commence.

Ottawa, Ont., Can.—Only preliminary work has been done thus far for the proposed Chaudiere dam; cost to be about \$150,000.—J. B. McKee, of Ottawa, Engineer.

FIRE EQUIPMENT

Birmingham, Ala.—Arrangements are being made to build a fire engine house at Woodlawn at a cost of \$15,000.

Little Rock, Ark.—Plans have been drawn for a central fire station; estimated cost, \$15,000.—Chas. F. Hafer, Fire Chief.

Washington, D. C.—To consider estimates for an appropriation to remedy fire danger conditions in the public school buildings of the district, the Board of Education held a special meeting in the Franklin Building; it was decided to ask Congress for \$700,000 to make the buildings fireproof.

Evansville, Ind.—Arrangements are being made to establish a fire company and build engine house in the Teakopple suburb.—Address City Clerk.

Gas City, Ind.—Council is planning to purchase fire wagon.

Lansing, Mich.—A special election will be held March 26, to vote on issue of bonds for improving the city fire protection; it is proposed to purchase two additional fire engines.

Eveleth, Minn.—Bids will be advertised for the purchase of fire wagon.—Address City Clerk.

Webb City, Mo.—The Fire Department has petitioned Council for the purchase of fire engine, estimated to cost \$3,000.—Address City Clerk.

Fairmount, N. D.—A fire company is being organized; Council has been petitioned for apparatus.—Address Village Clerk.

Wahpeton, N. D.—Council is preparing to install fire alarm.

Bryan, O.—An ordinance has been passed providing for an issue of \$10,000 bonds for improving the light and water plant.

Canton, O.—Council has under consideration an issue of \$60,000 bonds for building a central fire station.—Address City Clerk.

Columbus, O.—An ordinance from the Board of Public Safety providing for issue of \$7,000 bonds for erection and equipment of the wholesale district engine house has been given second reading in Council.

Curtice, O.—A disastrous fire occurred in this place; it is without fire protection.

Mitchell, S. D.—The fire company has petitioned Council for rubber coats, smoke protectors, etc.

Decatur, Tex.—The question of issuing bonds for the construction of water tower will be submitted to a vote of the people.

Richford, Vt.—Council has decided to build hose house at a cost of \$4,000.—Address Town Clerk.

Antigo, Wis.—Council is preparing to improve fire protection.

PUBLIC BUILDINGS

Bessemer, Ala.—The Board of Education is about to ask competitive plans for a high school, to cost about \$25,000.

Little Rock, Ark.—The School Board has authorized bids to be received, to be opened March 28, for erecting the Glenwood Park School at Seventeenth and Main streets; probable cost, \$40,000; Gibbs & Sanders, of Little Rock, prepared the plans, which provide for a three-story brick and steel structure.

Sacramento, Cal.—The citizens have voted bonds for the erection of high school building.—Address City Clerk Desmond.

Bristol, Conn.—The plans prepared by Theo. Peck, of Waterbury, for a six-room addition to the high school have been accepted; cost, approximately \$27,000; a special town meeting is to be held soon to vote on this improvement.

Meriden, Conn.—The Armory and Arsenal Commission has accepted the plans of C. S. Palmer, 11 Colony street, Meriden, for the erection of the proposed \$90,000 armory in Meriden. The plans contemplate a red brick building with limestone trimming, 178 feet long and 145 feet wide. There will be three towers, a main central tower and two smaller ones. The drill hall will be 96x150 feet.

Twin Falls, Idaho.—The preliminary plans for a \$50,000 school, as prepared by Wayland & Fennell, of Boise, have been accepted by the committee, consisting of B. A. Baker and W. E. Nixon; working plans are to be prepared as soon as possible.

Chicago, Ill.—Plans for the new City Hall, which are being prepared by Holabird &

Roche, Monadnock Building, will be ready about May 1.

Sharpsville, Ind.—The contract for erecting high school (bids opened March 2) has been awarded to W. H. Finley, of Tipton; cost, about \$20,000.—George W. Herron, School Trustee.

Goodland, Kan.—The School Board has appropriated \$20,000 to erect a school.

Latonia, Ky.—Two schools are to be erected this year by the Board of Education, plans for which are now being prepared.

Bangor, Me.—The erection of a children's ward building at the Eastern Maine General Hospital to cost about \$35,000 is under consideration; the building is to be two or three stories high, of brick construction.

Annapolis, Md.—A bill has passed the Senate and House appropriating \$30,000 for an annex to the Maryland Penitentiary for female convicts.

Chicopee, Mass.—G. B. B. Alderman, of Holyoke, is architect for the manual training high school to be erected in Chicopee.

Cambridge, Mass.—Plans have been completed for the two-story brick and limestone dental school which is to be erected at Harvard College and for which there is a building fund of \$140,000.

Fall River, Mass.—The Finance Committee has recommended to the School Committee that the city erect three new schools, one eight-room and two of twelve rooms.

Marlboro, Mass.—James F. Bigelow, of Marlboro, is preparing plans for police and fire headquarters building, to cost about \$40,000.

Taunton, Mass.—The erection of a police station, to cost \$30,000, is under consideration.

The Committee on Property has decided to recommend the erection of a brick fire station on Oak street and Agricultural avenue, to cost \$19,200.

Worcester, Mass.—The School Committee is considering the erection of a six-room addition to the East Kendall street school, to cost \$30,000.

Maryville, Mo.—An election will be held April 7 to vote on the question of issuing \$25,000 bonds for the erection of City Hall.—Address R. G. Sanders.

Butte, Mont.—Announcement has been made by the Chairman of the Board of County Commissioners that work upon the proposed Court House will begin May 1, the plans having been adopted. The building will cost \$750,000, and it is proposed to build one wing on the vacant lots west of the Court House, into which the officers will move, after which the present structure will be torn away and the other wing completed.

Beatrice, Neb.—The proposition to issue \$80,000 school bonds carried.—Address Clerk of the Board of Education.

Wayne, Neb.—The School Board is arranging to erect a \$50,000 high school.

Goffstown, N. H.—The town meeting voted \$14,000 for a public library and memorial hall, to be built at the corner of Main and Elm streets, where the residence now occupied by Mrs. Frank B. Mills and Miss Elizabeth McLane stands. Frank A. Parker, the owner, has offered to move this house and donate the land for the library. There could not be a more desirable location in the town than that for a public building. A building committee was appointed, consisting of Frank A. Parker, Robert M. Gordon, Charles A. Davis, George W. Colby and George L. Eaton.

Bayonne, N. J.—The Board of Education has decided upon a site at Thirty-first street and the Boulevard, for the high school, and has engaged John T. Rowland, 15 Exchange place, Jersey City, to prepare the plans for the building.

Burlington, N. J.—Council has decided to reconstruct the City Hall at a cost of \$20,000, on plans prepared by Henry A. Brown.

Passaic, N. J.—John F. Kelley, Postoffice Building, Passaic, and Davis & Davis are preparing plans for high school, to cost about \$200,000.

Auburn, N. Y.—The Board of Education has returned all the bids recently received for erecting the grammar school and alterations to the high school; the plans are to be modified so as to reduce the cost.

The Committee on Buildings and Repairs has been authorized to secure drawings and specifications for the necessary addition to the Garrow street School.

Huntington, L. I., N. Y.—W. E. Bryant, Village Clerk, states that the citizens have voted \$80,000 bonds for the erection of a high school.

Norwich, N. Y.—It is proposed to repair and improve the municipal building at a cost of \$20,000; the citizens voted to issue bonds for this work.—J. C. Robinson, City Clerk.

Poughkeepsie, N. Y.—Local architects have been invited to compete for furnishing plans and specifications for a new fire house, to be erected on Academy street, to cost \$15,000.

Rochester, N. Y.—The Secretary of the Board of Education has been directed to ask

bids for erecting a school on the site of No. 26 on Clifford street. It is intended to erect part of the school now, which will include the assembly hall, and attach it to part of the old building; the cost of this part of the structure is to be about \$75,000.

Savanna, N. Y.—The citizens have decided in favor of erecting an addition to the school.

Syracuse, N. Y.—Archimedes Russell and Melvin L. King, architects, Snow Building, Syracuse, are preparing plans for remodeling the former court house into a city building, to be used by the Bureau of Education and Police Department; estimated cost, \$100,000.

Raleigh, N. C.—An election will be held, April 7, to decide the question of issuing \$10,000 6 per cent. school bonds.—Address Clerk, Board of Education.

Cincinnati, O.—E. H. Dornette, Pickering Building, has completed plans for the Eleventh District School, to be erected on Linn street, at a cost of \$200,000.

Bids will be received until April 13 at the office of William Grantman, Clerk Board of Education, for \$250,000 school improvement bonds.

Cuyahoga Falls, O.—The citizens will vote on the question of issuing \$40,000 bonds for the erection of a schoolhouse.—Address Clerk, Board of Education.

Lima, O.—Council has voted \$30,000 with which to remodel the old city building.

Port Clinton, O.—The citizens have voted \$75,000 bonds for the construction of school houses.—Address Clerk, Board of Education.

Coaldale, Pa.—Hewitt, Stevens & Paist, Bullitt Building, Philadelphia, are preparing plans for a hospital to cost \$30,000.

Conway, Pa.—Council has decided to erect a modern, up-to-date city building, and Messrs. Bruce, Borough and Holsinger were appointed a committee to secure or look up a suitable site; the work of building will commence at the earliest date possible.

Pittsburg, Pa.—Architects Kiehnel & Elliott's designs for engine houses in the Nineteenth and Twenty-first Wards have been accepted by the city, and the contract for their erection will soon be let; the cost is expected to be about \$25,000 and \$30,000, respectively. The design for a hose house prepared by Knapp & Dixon, to be located in the Thirty-ninth Ward, was also accepted by Director E. G. Lang; there was considerable competition between local architects, and the plans accepted provide for a number of innovations which will be greatly appreciated. The hose house will cost about \$12,000.

Manning, S. C.—Bids will be received, April 15, noon, for Clarendon County, non-taxable, 5 per cent. 40-year Court House bonds for \$60,000.—D. W. Alderman, Chairman Court House Commission.

Bids will be received, April 15, noon, for \$30,000 non-taxable, 5 per cent., 20-year bonds by the Board of Trustees of School District No. 9.—A. Leir, Chairman of Board.

Watertown, S. D.—The Board of Education is said to be considering plans for the Second Ward School and also plans for a high school.

Buntyn, Tenn.—The County Board of Education at Memphis has accepted the plans of Jones & Furbringer, Porter Building, Memphis, for the brick Elizabeth Messic High School, which it is proposed erecting in Buntyn, the Eighteenth District, at an approximate cost of \$20,000.

Aquilla, Tex.—The citizens have voted \$12,000 bonds for the erection of school house.—Address Clerk, Board of Education.

Livingston, Tex.—The School Board has adopted plans for a \$19,000 school.

San Angelo, Tex.—The Board of School Trustees has accepted plans prepared by M. L. Waller, Columbia Building, Ft. Worth, for two 2-story, brick, 8-room schools, each to cost approximately \$15,000.

Heber, Utah.—The citizens have voted bonds for the erection of high school.—Address Clerk of the Board.

Petersburg, Va.—The plans of W. L. Cornear of Richmond have been accepted by Council for improvements at the city jail, estimated to cost \$20,307.

Portsmouth, Va.—This city will, at an early date, sell bonds to the amount of \$30,000 for a new high school.

Chehalis, Wash.—The erection of a high school is under consideration.

Moundsville, W. Va.—The citizens will vote on the question of issuing \$33,000 bonds for erection of school house.

ELECTRIC RAILWAYS

Bridgeport, Ala.—A ten-year franchise has been granted to C. A. Sutliff and associates, of South Pittsburg, Tenn., for operating an electric light and power system in Bridgeport, also the construction of a street railway system. It is the intention of this company to construct an interurban system to connect the towns of Bridgeport, Ala.; Copenhagen, South Pittsburg and Jasper, Tenn.

Bridgeport, Conn.—The Connecticut Company is expected to begin work early in the spring upon two extensions of its city lines,

one to run south on Hancock avenue to the thickly populated foreign quarter south of Railroad avenue to Stratfield.—Address Vice-President Townley.

Fitzgerald, Ga.—The Fitzgerald and Ocilla Electric Railway Company has been organized, capital \$50,000, to build a line about fourteen miles long, including city tracks, in Fitzgerald, and from Fitzgerald to Ocilla, nine miles, via Minnie Lake.—S. Tilden Holtzendorf, President; Chesley A. Holtzendorf, Secretary.

Jesup, Ga.—D. G. Zeigler, Chief Engineer of the Goose Creek Railroad and Power Manufacturing Company, Columbia, S. C., states that company probably will begin work on its line about May 1. The line will extend from Jesup to Dock, a distance of about twenty-four miles. The motive power will be electricity. It is planned to operate fifteen cars. The repair shops will be located in Jesup and the power station will be erected at Goose Creek. The company was incorporated on March 5 with a capital stock of \$300,000.

Chicago, Ill.—The Chicago City Railway Company has purchased site at Brighton Park for erecting power house and car barns.

Chicago, Ill.—Permits for the rehabilitation of nearly ten miles of tracks have been obtained by the Chicago Railways Company from Michael Doherty, Superintendent of the Street Department, and the work will be commenced soon after March 25. The permits call for the rehabilitation of the tracks on North Clark street, between Washington street and Addison avenue, and on Milwaukee avenue, between Desplaines and Robey streets. The estimated cost of the work is \$40,000 a mile.

Taylorville, Ill.—Council granted a franchise to the St. Louis, Terre Haute and Quincy Interurban Company, permitting that company to run a line through Taylorville; nearly all the right of way in Christian County has been secured by the company.

Evansville, Ind.—The Evansville Terminal Railway Company, whose primary purpose is to construct ten miles of track from Evansville to Newburg to connect with the Evansville and Eastern line at the latter point, has filed articles of incorporation; capital stock, \$200,000; it is understood the new company will parallel the Evansville, Suburban and Newburg tracks most of the way.—A. F. Karges, M. S. Sonntag and others, incorporators.

Warsaw, Ind.—Council has granted the Winona Interurban Railway Company a franchise to use West Center street for the construction of a portion of the Warsaw and Peru line; work on the grade of the road between this city and Mentone has been resumed and the grade is to be rushed to completion, with a view of having cars running by July 3, if not before.

Topeka, Kan.—E. M. Lambkin has made application to the Secretary of State for a charter for an electric railway line between Kansas City, Mo.; capital, \$10,000,000.

Manchester, Ky.—Louis des Cognets and C. N. Manning, of Lexington, are planning to construct an electric railway from Barbourville to Manchester, a distance of about twenty-four miles.

Baltimore, Md.—The Baltimore and North Branch Railway has been incorporated by H. M. Benzinger, Isaac Price and others; it is intended to have the new road connect with the United Railways lines, which now extend to Woodlawn, thus establishing connections between Baltimore and North Branch.

Laurium, Mich.—The Houghton County Street Railway Company, W. H. McGrath, Manager, Houghton, has completed plans for the construction of a new power substation at Laurium and also the building of a considerable extension on the car house at that point.

Minneapolis, Minn.—The Council's Committee on Underground Wires has granted permission to the Twin City Rapid Transit Company (W. J. Hield, General Manager, Eleventh street and Hennepin avenue), to construct an underground conduit system on the East Side for carrying feed wires to the north and northwest trolley lines.

Pittsfield, Mass.—The Albany and Hudson Railroad Company, which is operated by third rail system, is ready to build 22 miles of connection from Nassau, N. Y., to State line before October 1, according to the Boston "Transcript." It also offers to spend \$35,000 on Lebanon Mountain, according to agreement, before May 1, preparing for the connection of the proposed Troy, Albany and Pittsfield Street Railway, and will contract to build this season its six miles of connecting road from West Pittsfield to the State line. Sperry & McLaine, New Haven, Conn., Engineers, have made the surveys, plans and estimates. The road will cost about \$1,000,000 and will run from Nassau through the following townships: East Nassau, Brainard, West Lebanon, New Lebanon, Lebanon Springs and Hancock. It is estimated that

the six miles of connection of the Pittsfield road up Lebanon Mountain will cost \$50,000 a mile. The route follows along the State road over Lebanon Mountain. A conference will be held in Pittsfield between Albany capitalists and the promoters concerning the matter. It is probable that the road will be built this year.—R. H. Smith is General Manager of the D. & H. Co., Albany.

Jersey City, N. J.—The Interstate Traction Company has been incorporated with \$200,000 capital to operate steam and electric railways, etc.—C. B. Warner, B. S. Mantz and others, incorporators.

Greensboro, N. C.—A franchise has been granted to Charles L. Van Noppen and associates for constructing an electric railway three miles long on West Market and lateral streets.

Bridgeport, Tenn.—C. A. Sutliff and associates have secured a franchise to operate an electric light and power system in Bridgeport, also to construct an interurban railway to connect Bridgeport, Copenhagen, Richard City, South Pittsburg and Jasper.

Dayton, O.—C. H. Bosler, 816 Riebold Building, President of the Dayton Street Railway Construction Company, states that this company will build seven miles of double track line in Dayton.—J. J. Hall, Secretary.

Ellwood City, Pa.—J. T. Meckler, John M. Curry, J. N. Kirker and J. C. Keith, all of Ellwood City, are interested in plan to charter a company to build an electric railway from Ellwood City to Butler, Pa., via Wurttemberg. It is stated that sufficient money has been raised for the preliminary surveys, which will be started as soon as the company has been incorporated.

Christiansburg, Va.—The Montgomery Electrical Company has been incorporated to build the proposed electric railroad from Christiansburg to Cambria; capital stock, \$5,000 to \$50,000.—J. L. Vaughan, Shawsville, President.

Grafton, W. Va.—The Grafton Traction Company is considering plans to build an extension about a mile and a half long through South Grafton to the West Side.—John T. McGraw, President.

Washburn, Wis.—The action of the State Railway Commission in authorizing the Ashland Street Railway and Lighting Company to issue common stock to the amount of \$50,000 and preferred stock for the same amount and development bonds to the amount of \$300,000 will mean an interurban line to this city the coming summer; A. E. Appleyard of Boston, is the leading spirit in the newly organized company, and it is his intention to at once start selling bonds and make the necessary preliminary surveys.

Prescott, Ont., Can.—J. B. Gaughn has under consideration the construction of an electric railway along the banks of St. Lawrence River from Prescott, a distance of sixteen miles.

BRIDGES

Quincy, Cal.—The Plumas County Board proposes to erect several bridges this year.—Address County Auditor.

Jesup, Ga.—The County Commissioners of Wayne County are considering the erection of bridge across Satilla Creek.—P. R. Richardson, Chairman of Board.

Waycross, Ga.—The Ware County Commissioners have decided to build a bridge across Satilla River; Pierce County will co-operate.—Address County Auditor.

Meredora, Ill.—The Wabash Railway will replace bridge at Meredora and Valley City with steel structure.—A. O. Cunningham, Chief Engineer of Wabash Railway, St. Louis, Mo.

Topeka, Kan.—The Shawnee County Commissioners and the Jefferson County Commissioners (Oskaloosa C. H.) are considering plans for a bridge across the Kansas River at Grantville; the proposed bridge to be of steel, about 900 feet in length, and in six spans; the expense is estimated to be about \$15,000, which will be equally divided between Jefferson and Shawnee Counties.

Boston, Mass.—Mayor Hibbard has instructed City Engineer Jackson to prepare plans and advertise for bids for the reconstruction of the Boylston street bridge; work will probably begin on the bridge in four months; the reconstructed bridge will cost between \$60,000 and \$70,000; according to the Mayor's intentions, if the work is performed within a specified time the contractor will receive a bonus, but will have to sign a contract providing a money penalty for every day over the time limit.

Southbridge, Mass.—Ainee Langevin, Highway Engineer, recommends the rebuilding of both Mill and River street bridges.

Albion, Mich.—Expert bridge builders and architects will be brought to the city to estimate on the cost of rebuilding bridges taken out by flood, and as soon as approximate figures can be submitted a bonding proposition will be drafted and placed before the people at the spring election.—Address City Clerk.

Portland, Mich.—A city bridge has been taken out by flood; loss, \$5,000.—Address City Clerk.

Montevideo, Minn.—The Chippewa County Board contemplates the construction of concrete bridges and culverts over ditches which have recently been dug throughout the county.—Address County Auditor.

Sauk Center, Minn.—A petition is being circulated asking the Commissioners of Todd County to build a bridge over Sauk River, between the townships of West Union and Little Sauk, at a point eight miles north of this city.—Address Todd County Auditor, Long Prairie.

Gulfport, Miss.—All bids opened March 2 by the Board of County Supervisors were rejected for the construction of a drawbridge near Morris Ferry on road over Tchoutacabouffa River; new bids will soon be received.

Joplin, Mo.—The city has voted \$50,000 bonds to build viaducts.—J. B. Hodgson, 201 Joplin street, City Engineer.

Kansas City, Mo.—Plans have been prepared for the Park Board for two reinforced concrete bridges over Blue river and the railroad tracks at Sixty-fourth and Seventy-first streets, in Swope Park.

Milford, N. H.—The question of the building of a new bridge which is to take the place of the county bridge, so called, was discussed at the town meeting. The sentiment seemed to be that the bridge should be built of stone, and it was finally voted to appoint a committee of five to report to a special meeting to be held April 21. It was voted to leave the matter of the cost of repairs of the Jones bridge to the same committee.—James M. Laws, Town Clerk.

Jersey City, N. J.—President John J. Heavey, of the Street and Water Board, has received notice from the Pennsylvania Railroad Company that the company is preparing plans and specifications for the new freight track which it is to build at its own expense across the Newark avenue at Seventh street; the new bridge is to cost about \$40,000.

Santa Rosa, N. M.—Bids are invited by the County Commissioners for constructing a two-span truss bridge over Pecos River.

Cleveland, O.—A resolution has been introduced in Council to appropriate land on the West Side for the proposed bridge from East Fifty-fourth street to Linkon avenue.

Marietta, O.—The County Commissioners have decided to build new approaches to the twin bridges in Belpre Township and to erect one new approach to the Marshal bridge in Decatur Township; also to erect a new bridge in Barlow Township, known as the Breckenridge structure, and to put in a new bridge over Big Run in Wesley Township; the Yates bridge in Decatur Township may be replaced with a new structure, as probably will also be the Webster bridge in Waterford; the Hill bridge in Belpre Township is to be replaced by a better structure also; the County Engineer will be asked to furnish the plans and specifications for the structures that are to be built, and bids will then be advertised for.—Address County Engineer.

Westchester, Pa.—County Surveyor N. R. Ramb has been directed to draw plans for stone arched bridge over Clay Creek in London Grove Township.

Williamsport, Pa.—The proposed river bridge across the river between Newberry and Du Bois townships was approved by the Grand Jury; the Commissioners estimate the structure will cost \$120,000.—Address Lycoming County Auditor.

Knoxville, Tenn.—The West Knoxville citizens are anxious for a bridge to be built at Asylum avenue; this matter will be pushed by Alderman T. B. Cox and J. H. Welcker, who are both interested in having a new viaduct built; Asylum avenue is one of the main thoroughfares to both the Ninth and Tenth wards.

Luray, Va.—The Legislature has appropriated \$25,000 to be used in bridge building in Page County, with the understanding that a similar amount will be given by the County.—Address County Auditor.

REFUSE DISPOSAL

Birmingham, Ala.—Advocates of a crematory for Birmingham are agitating the matter of allowing the people to vote on the issuance of \$100,000 bonds on May 4, the same date as the election for the issuance of \$400,000 worth of sewer bonds.—Address City Auditor.

Berkeley, Cal.—The City Trustees are considering the question of issuing \$30,000 bonds for constructing garbage crematory.

Vincennes, Ind.—The garbage disposal plant has been destroyed by fire; it was owned by a private concern; a new one may be built.

Detroit, Mich.—The city is planning to adopt a new garbage reduction system.

Lockport, N. Y.—Council will soon advertise for bids for the collection of garbage from all streets, and ashes from the district within the fire limits only, in order not to

exceed the \$3,000 appropriation; Godfried & Kohler, who have performed the work during the past year, collected both ashes and garbage from all streets; their contract expires April 1.

Poughkeepsie, N. Y.—The matter of purchasing a street flushing machine for \$1,000 was considered by the Board of Public Works, and Superintendent Harding was ordered to go to Newark, where the machines are made, and examine them; Dr. Otis said the Board had saved enough in its purchase of a rolling machine to buy a flushing machine.

Troy, N. Y.—Specifications for street sprinkling and street sweeping machines have been presented by the Commissioner of Public Works and approved by the Board of Contract and Supply.

Salem, O.—Harry Venable, who has been collecting garbage in the city for the past three years, has asked the Board of Health to provide a better system for the work; there are now but 200 cans scattered about the city, while 500 are required in the business section to prevent the throwing of garbage on the streets; the Board will give the matter immediate attention.—President Carlisle, Clerk Schwartz.

Carbondale, Pa.—The annual estimates include an estimate for a street sweeper.

Johnstown, Pa.—It is understood that representatives of the Board of Health have opened with the People's Garbage and Fertilizer Company tentative negotiations looking to the purchase of the garbage plant in the Seventh Ward.

New Castle, Pa.—The Health Committee of Councils has reported that the garbage plant near the Pennsylvania Engineering works is badly in need of repairs. An order was issued directing Health Officer Horner to take a mason there and have several walls repaired. The garbage ordinance, renewing the contract between the city and the garbage collector, Mr. Updegraff, was concurred in by the committee.

El Paso, Tex.—An election will be called soon to vote on question of garbage and sewage disposal; probable cost of work, \$10,000.—J. Sweeney, Mayor.

Manchester, Va.—The city contemplates building plant for incineration of garbage and street refuse; A. G. Fostick, 1208 Decatur street, Chairman of Committee.

Bellingham, Wash.—The question of constructing a municipal garbage crematory was suggested at a recent meeting of the Board of Public Works, but no definite action has yet been taken.—F. B. Graves, City Comptroller.

Wheeling, W. Va.—The city crematory, on the summit of Wheeling Hill, burned to the ground March 17, with a loss of \$15,000, uninsured; with the approach of warm weather and no means of consuming garbage a serious situation is impending.

MISCELLANEOUS

Albany, Ga.—The entire issue of \$75,000 municipal bonds was awarded to the combined bid of the Exchange Bank and the National Bank of Albany, their bid being 101 and accrued interest. The money is to be used for improving and extending the city building, to improve streets and to improve and extend the water works and sewerage system.

Muncie, Ind.—Council has contracted with J. Clyde Power, of Indianapolis, for plans for the construction of a general park system.

Alexandria, La.—An election will be held April 7 to vote on the question of issuing \$32,000 improvement bonds.—Address City Clerk.

New Orleans, La.—The Board of Port Commissioners will soon ask bids for constructing the Jackson-to-Celeste-street steel sheds, for which an appropriation of \$99,000 is available.

Baltimore, Md.—The \$2,000,000 Baltimore city stock, for which bids were opened at the City Hall, was oversubscribed nine times, the aggregate being about \$18,000,000; the bids were for two loans of \$1,000,000 each at 4 per cent., one for parks and the other for the annex; the highest bid was 105 and the lowest successful bid 101.051; the successful bidders were: Samuel Keller, New York; Ella Jenkins, Baltimore; M. A. McKenna, New York; Robert Weiss, Wilmington, Del.; Samuel Byerly, New York, and Tobey & Kirk, New York.

Columbus, O.—An ordinance appropriating \$2,500 and authorizing the Service Board to advertise for bids for the furnishing and placing of an iron fence about the filtration and softening works of the Water Works Department, was given second reading in Council.

Like action was taken on an ordinance authorizing the Service Board to purchase from George Urlin about thirteen acres of land along the Olentangy River, about Doddridge street. The land is to be used for levee purposes.

BIDS RECEIVED

Santa Monica, Cal.—A. Stutzer Grading and Cement Company of Los Angeles was awarded the contract on March 9 for the construction of a re-enforced concrete pier to extend into the ocean at the foot of Colorado avenue. Proposals were submitted as follows: A. Stutzer Grading and Cement Company, \$82,890; Cotton Bros., \$89,750; Greenleaf Carpenter Company, \$93,750; A. H. Calkins & Co., \$93,850; Atlantic Gulf and Pacific Company, \$108,000.—Thomas H. James, City Engineer.

Denver, Col.—The Agricultural Ditch Company has awarded the contract for the construction of the proposed tunnel to J. A. Osner, 357 Broadway, Denver, at about \$16,000. G. R. Baker, 718 Equitable Building, Engineer.

Washington, D. C.—Bids were opened for the construction of a twelve-room school building in Mount Pleasant. Ten proposals were received, the lowest of which was that of the Fuller Construction Company, whose bid was \$97,500. The other bidders and their prices were: Burgess & Parsons, \$99,700; James L. Parsons, \$112,733; C. A. Langley, \$108,686; M. C. Davis, \$98,478; Thompson-Starrett Construction Company, \$111,251; Boryer & Smith, \$106,900; R. T. Humphrey, \$105,900, and J. M. Dunn, \$105,559.

Bids were opened for the construction of an 800 linear foot sewer, four feet in diameter in Sixth street, between Maine and Missouri avenues northwest. This sewer is in connection with the general sewage disposal system. Ten bids were received, and that of E. G. Gummel was lowest. The bids were as follows: (a) E. G. Gummel, 300 Rhode Island avenue, Washington, D. C.; (b) Warren F. Brenizer Co., Anacostia; (c) R. J. Beall Construction Company, 1219 F street, N. W., Washington; (d) James A. Coyle, Washington, D. C.; (e) Cranford Paving Company, Washington, D. C. Ordinary excavation, (a) 90 cents; (b) \$1.10; (c) \$1.28; (d) \$1.40; (e) \$1.49. Red brick masonry: (a) \$16; (b) \$13.50; (c) \$15; (d) \$16; (e) \$17. Vitrified brick masonry: (a) \$22; (b) \$21; (c) \$22.50; (d) \$24; (e) \$21. Concrete masonry "B," (a) \$7.36; (b) \$7.90; (c) \$9.25; (d) \$8.50; (e) \$7.90. Concrete masonry "C," (a) \$7.81; (b) \$7.45; (c) \$8.75; (d) \$7.75; (e) \$7.50. 6-in. diameter pipe, (a) 20 cents; (b) 30 cents; (c) 40 cents; (d) 25 cents; (e) 20 cents. Totals, (a) \$611; (b) \$6,580; (c) \$7,595; (d) \$7,640; (e) \$7,588.

The Commissioners of the District of Columbia have awarded the contract for the construction of a sewer at Ivy City, D. C., to Warren F. Brenizer Company, Washington, at \$8,377.

Fort Barrancas, Fla.—We have been advised that the contract for the 200,000-gallon reinforced concrete reservoir was awarded on March 12 to the Southern Ferro-Concrete Company, Atlanta, Ga., at \$12,820.

Atlanta, Ga.—The following bids have been accepted for street improvement material: Chattahoochee Brick Company for brick, at \$8.50 per thousand; Venable Bros., for furnishing rubble stone, at 60 cents a ton; R. O. Campbell, for cement, at 41 cents a hundred pounds, and W. F. Plane, for red chert at \$1.03½ per ton in 20-carload lots.

American Falls, Ida.—The Wheelwright Construction Company, Ogden, Utah, was awarded the contract, on March 2, by the American Falls Realty and Water Works Company, Pocatello, for the construction of a water works system at American Falls, at about \$15,000.—L. L. Evans, General Manager.

Cairo, Ill.—Roy L. Williams has been awarded contract for constructing 14,000 square yards brick pavement on 5-inch 1:3:6 concrete, at \$2.05 per square yard; excavation, 35 cents per cubic yard; also 9,000 lineal feet curb and gutter, at 55 cents.—W. B. Thistlewood, City Engineer.

Fort Wayne, Ind.—The Board of Public Works has secured 400 tons of water pipe at \$22.60 a ton, or the cheapest price ever paid for water mains in this city; the contract was awarded to the Massillon Iron and Steel Company. Six other big firms participated in the bidding, which was close.

The garbage contract ordinance with Frank Draker was passed, and it was recommended that the Public Health Board instruct the sanitary policemen to assist the Public Works Department by noting and reporting the manner in which the garbage is collected. The Board of Works has agreed to erect an addition at the cremator to house the wagons.

A contract ordinance with the Signal Phone Alarm Company was referred to the Committee on Contracts and Franchises. The company will put in the new police alarm system. Another contract with the S. F. Bowser Company for the building of a spur from the Pennsylvania to the plant was also referred to the same committee.

Ottumwa, Ia.—J. C. Blunk, of Ottumwa, has secured the contract for constructing about 1,425 lineal feet trunk sewer on Mill street, equivalent in size to an 8-foot 3-inch

3-ring, egg-shaped sewer, at \$15, \$16 and \$18.75 per lineal foot, according to character of subsoil; total cost, about \$26,000.—

Louisville, Ky.—The following bids were received, on March 12, by the Commissioners of Sewerage, for the construction of Section A of the Beargrass Intersector: E. O. Nave Brothers & Co., Louisville, \$91,699; A. S. McCracken, Columbus, O., \$104,428; American Engineering and Construction Company, Chicago, Ill., \$141,408; H. J. Stevens, Knoxville, Tenn., \$150,087; Henry Bickel Company, Louisville, \$168,346.—F. B. F. Breed, City Engineer.

The C. W. McFarland Company was awarded the work of paving nine alleys with vitrified brick. The construction will cost about \$1.48 per square yard. Rupp street, from Logan to Banbridge, will be paved by Henry Bickel, the work to cost \$1.54 per square yard.

Contractor Lee Fligg was awarded the contract for paving Seventeenth street, from Maple to Arbogast, at \$1.60 per square yard.

St. Paul, Minn.—The lowest bid for sewer along the right of way of the Great Northern from Cortland street to Jackson and up Jackson to Capitol Heights was submitted by Chris. Johnson, for \$10,579, and is said to be too high.

Winona, Minn.—Abell & Braley Company has secured contract for paving Main and Center streets, about twelve blocks, at \$1.29 and \$1.30 per square yard; Purlington brick to be used; reset curb, 7 cents per lineal foot; new curb, 37 cents, and retaining curb, 25 cents.—Paul A. Jasmer, City Recorder.

Magnolia, Miss.—The contract to erect school awarded to Louis Lenoir, at \$21,022.

Farmingdale, N. J.—Richard Hafeman, city, was awarded the contract, on March 11, by the Board of Freeholders, for the construction of the Farmingdale-Hamilton gravel road.

Thomas G. Orr, Freehold, secured the contract for the construction of the Manalapan stone road.

Plainfield, N. J.—A contract for street sprinkling has been awarded to John E. Keely for \$800 a month, from May to October. At other times \$4 a day will be paid. Eight carts will be engaged in the work, and the contractor must provide a horse and wagon to aid himself in superintending the work.

Passaic, N. J.—John F. Kelly and Davis & Davis, of Passaic, are preparing plans for high school, to cost about \$200,000.—Chas. F. Cowley, Secretary, School Commission.

Paterson, N. J.—Eight bids were submitted to the Road Committee of the Board of Freeholders on the work of completing the improvement of a little over 2½ miles of Midvale or Greenwood Lake road, a portion of which was completed last autumn. The lowest estimate was made by John C. Tierney, and the committee voted unanimously to recommend to the Board that the contract be awarded to him, at \$43,442.70; George F. Brackett bid \$43,889.47; Francisco Brothers, \$48,098.40; J. S. Sowerbutt, \$52,360.54; E. C. Humphrey & Co., \$57,378.82; Wright & Lindsley, \$66,644.40; Robert Dority, \$68,471.

Brewster, N. Y.—The contract for laying water pipe and fixtures and constructing a concrete reservoir has been awarded to John C. Tierney, Hoboken, N. J., at \$9,251.

Brooklyn, N. Y.—Admiral Hollyday, Chief of the Bureau of Yards and Docks, Navy Department, has recommended the acceptance of the bid of the Williams Engineering and Contract Company, of New York, to complete the Brooklyn dry dock, at \$761,400; the dock was 15 per cent. completed when a former contract was declared forfeited; Congress appropriated \$1,000,000 for the work, but it will be asked to raise this limit to about a million and a half, so as to permit an extension of about 50 feet to the length originally contemplated, making the total length over 560 feet, which will accommodate the largest American battleships afloat and projected.

Buffalo, N. Y.—Of the bids opened by United States Engineer Fisk for the construction of the \$1,000,000 lock wall in the harbor at Black Rock, McArthur Brothers Company, of New York, was low for the work, at \$823,304.45. The bids will be sent to Washington, where the contract will be awarded. There were six bidders for the work, and all but one of them were below the government estimate of \$1,100,000 for the work. The principal items of the bids are pumping, maintenance, sheet-steel piling, pumping and excavating. The largest items of expense are for the sheet steel for the cofferdams and concrete for the walls. The bids in detail were: Great Lakes Dredging and Dock Company, \$977,039; Buffalo Dredging Company, \$965,321.50; the Foundation Company, \$993,522.11; T. A. Gillespie Company, \$1,062,309; Reed-Coddington Company, \$1,238,613; McArthur Brothers Company, \$823,304.

Dunkirk, N. Y.—Lewis & Kitchen, of Chi-

cago, Ill., secured the contract for the ventilating and heating system which is to be installed in the alterations and additions to the high school, at \$13,500.

Watertown, N. Y.—Bids were opened for paving, with brick, Leroy and Main streets, about 4,500 square yards, as follows; the bids are per square yard, and cover excavation and foundation: W. J. Semper, Brownsville, eight bids, \$2.43 to \$4.37, according to class of brick; Mulderry Brothers, Albany, nine bids, \$2.44 to \$4.12; C. O. McComb, Syracuse, eight bids, \$2.37 to \$5.30; Dollard & Haller, Albany, three bids, \$2.80 to \$4.49; and Hogaman, Miller & Hogaman, Rochester, eight bids, \$2.45 to \$4.50.—Henry E. Baker, City Engineer.

Charlotte, N. C.—The Atlantic Bitulithic Company, Mutual Building, Richmond, Va., has been awarded the contract for laying water mains here, at about \$30,000.—T. S. Franklin, Mayor.

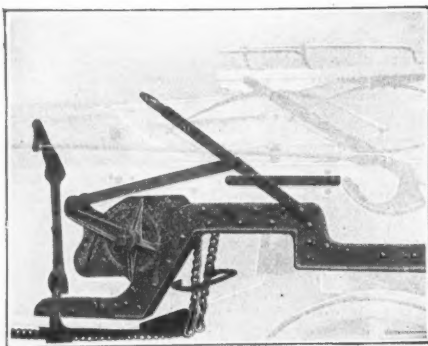
Bradford, O.—The low bid for erecting the 8-room school was submitted by A. R. Zimmermann, of Gettysburg, at \$25,166, not including heating or plumbing.

Cambridge, O.—Porter E. Gibson, city, has secured the contract for brick paving on North Eighth and Long streets and Madison avenue, at the following bid: 4.976 cubic yards excavation, 35 cents; 13,345 square yards brick paving, 6-inch gravel foundation, cement fill, 51 cents; 8,044 lineal feet straight curb, 68 cents; 384 lineal feet of 10-foot radius curb, 90 cents; 240 feet of 5-foot radius curb, \$1.15; 432 feet protection curb, 35 cents; 10 catch basins, each, \$18; 3 manholes, each, \$30; 500 feet 15-inch storm sewers, 65 cents; 170 feet 12-inch, 55 cents; and 1,000 feet 4-inch, ½ cent; total, \$15,700. Totals of other bids for this class of work: Danl. Monroe & Son, Portsmouth, \$19,422; Adams Brothers Contracting Company, Zanesville, \$17,573; Freshwater Brothers & Co., Chester, W. Va., \$17,128; Kelley Brothers, Portsmouth, \$17,634; and Trippeer & Son, Peru, Ind., \$17,881.

The contract for furnishing the brick for the above work has been awarded T. B. Townsend Brick and Contracting Company, of Zanesville, for \$9,271; the Harris Brick Company, of Zanesville, bid also for furnishing the brick, at \$9,432.

Painesville, O.—Andrews & Everett, of Ashtabula, submitted the lowest bid for erecting the high school, at \$14,337.

Philadelphia, Pa.—Cramp & Son, Commonwealth Building, submitted the low bid



The Question of Service

Some dump wagons are made to sell

Others do fairly satisfactory work under favorable conditions, but

The VICTOR

is the most satisfactory and reliable DUMP WAGON under every condition.

BECAUSE

It is equipped with an automatic device for releasing the load and closing the bottom doors—an ideal arrangement for controlling the operation of the wagon and the work it is designed to accomplish.

It is absolutely impossible for the bottom doors to be opened until the driver is ready to release the load.

There are other dump wagons—there is but one VICTOR, which is different and better than all others.

F. H. Hieber Wagon Manufacturing Co.

1108 Union Bank Building

Factory: McKee's Rocks, Pa.

PITTSBURGH, PA.

for alterations and addition to the Jeremiah Nichols school, at \$114,489.

Elyria, O.—The J. W. Scott Company of Marion has the contract for paving Lake avenue and West street at their bid of \$60,000; specifications call for crushed stone base and for sawed curbing with grout filler, excepting along the street railway, where pitch filler will be used.

Middletown, O.—The Andrews Asphalt Paving Company of Hamilton has the contract for paving Yankee road and Fourth street, at \$2.10 per square yard; total, \$15,610. J. O. Shoup & Company of Dayton secured the contract for the curbs and gutter at 50 cents per foot.

Mingo Junction, O.—Charles Neville, city, has been awarded the contract for constructing sewers as follows: 1,800 feet concrete 23.5 and of 6-foot, egg-shaped sewer, average cut 12 feet, \$8 per linear foot; three catch basins, each \$35, and four manholes, each \$40; total, \$14,665. Bids were opened March 1.

Norwalk, O.—L. Corron, city, was low bidder for constructing the Chatham street and St. Mary's street sewers, bidding \$7,540.79 for the first, which consists of 5,838 feet 24 to 10-inch sewer, in trench, average depth 9.5 feet, clay and sand excavation, and \$3,638.30 for the second, consisting of 2,957 feet 27 to 10 inch, sewer in 8-foot trench. The totals of the other bids received, the Chatham street being given first, and the St. Mary's street second, were as follows: Western Reserve Construction Company, Elyria, \$8,370.64, \$4,209.62; Warden & Leese, Cleveland, \$7,794.32, \$4,119.37; James Quinn, city, \$8,584.96; A. J. Stough, Gallion, \$7,638.52, \$3,935.14. The details of the low bids follow:

St. Mary's street sewer: 2,957 linear feet trenching, back filling, hauling and laying pipe, etc. (labor only), per linear foot, 50 cents; 184 linear feet 24-inch sewer pipe furnished (material only), 91.5 cents; 316 linear feet 22-inch sewer pipe furnished (material only), 80.5 cents; 422 linear feet 18-inch sewer pipe furnished (material only), 57.4 cents; 1,264 linear feet 12-inch sewer pipe furnished (material only), 42 cents; 370 linear feet 10-inch sewer pipe furnished (material only), 36.5 cents; 6 catch basins and inlets constructed (labor and material), each \$11.25; 9 manholes constructed (labor and material), each \$11.25; 401 linear feet 27-inch sewer pipe to be substituted for concrete sewer (labor and material), per foot, \$1.35. The city has an interest in enough 24-inch pipe to supply the 24-inch size, and will furnish it to the successful bidder at the price he bids for same.

Chatham street sewer: 5,838 linear feet trenching, back filling, hauling pipe, laying pipe, etc. (labor only), per linear foot, 50 cents; 461 linear feet 24-inch sewer pipe furnished (material only), per linear foot, 91.5 cents; 1,300 linear feet 22-inch sewer pipe furnished (material only), per linear foot, 80.5 cents; 1,050 linear feet 20-inch sewer pipe furnished (material only), per linear foot, 69.5 cents; 836 linear feet 18-inch sewer pipe furnished (material only), per linear foot, 57.4 cents; 70 linear feet 15-inch sewer pipe, furnished (material only), per linear foot, 49.7 cents; 1,071 linear feet 12-inch sewer pipe furnished (material only), per linear foot, 42 cents; 550 linear feet 10-inch sewer pipe furnished (material only), per linear foot, 36.5 cents; 17 catch basins and inlets constructed (labor and material), each, \$11.25; 19 manholes constructed (labor and material), each, \$11.25; 2 regulators constructed (labor and material), each \$50. The city has an interest in enough 24-inch pipe to supply the 24-inch size and will furnish it to the successful bidder at the price he bids for same.

Springfield, O.—Chief S. F. Hunter, of the Fire Department, has closed a contract with the People's Light, Heat and Power Company to furnish light for the Central Engine House for 3 cents per 1,000 watt hours; the former price was 10 cents.

Toledo, O.—Garrigan Bros. were awarded the contract at \$24,000 by the Board of Public Service on March 2 for paving Fulton street.—Reynold Volt is Secretary of the Board.

Youngstown, O.—The following are the lowest bids opened by the Board of Public Service for paving (a) Marshall street, (b) Summit street: Victor Olson (a), with asphalt block, \$13,440, (b) with asphalt block, \$10,910; Martin Fleming, (a) with brick, \$9,377; A. O'Horo, (b) with brick, \$7,336; the Barber Asphalt Company, for furnishing 50 tons of asphalt, at \$26.50 per ton.

Harrisburg, Pa.—The Board of Public Works opened bids, nine in number, for the construction of Wildwood dam. The Ferro-Concrete Construction Company, city, was low bidder, at \$112,332. The award will not be made for some time. Following are the bidders and figures: McCormick & Co., Philadelphia, \$115,054; Ferro-Concrete Construction Company, Harrisburg, \$112,332; Antonio Cocco, Philadelphia, \$160,008.39; Henry & William Opperman, Harrisburg, \$161,987.96; United Ice and Coal Company, Harrisburg, \$124,748; Blackstaff Engineering Company, Philadelphia, \$159,418; Charles A. Sims, Philadelphia, \$143,217.29; Thiele Construction

Company, Johnstown, \$178,807.95; Bunting Construction Company, Flushing, L. I., \$149,818.40. The Ferro-Concrete Construction Company has been in Harrisburg since last August, and has its offices in the Union Trust Company Building. The firm is comprised of George H. Dunham, John F. Whitaker, and D. L. Diehl.

Philadelphia, Pa.—Proposals for two centrifugal auxiliary pumping engines for the Torresdale filter plant, each with a capacity of 5,000,000 gallons per day, were received and opened by Assistant Director Knight. Other supplies for the Queen Lane and Lardner's Point stations were also included in the bidding, which will involve an outlay of about \$66,000. The bids for the engines were: Dravo, Doyle & Co., \$6,510; D'Olier Engineering Company, \$6,475; Watson & Steelman Company, \$5,700; Walter Wood, \$5,850 and \$5,070; and the Allis-Chalmers Company, \$9,730.

Bids were also received by Director Neff for repair work and supplies for the hospital, the whole involving an expenditure of about \$5,000.

The members of the Committee on Police of the Fairmount Park Commission also opened bids for the uniforms of park guards, the bidders and their estimates being as follows: (a) park guards, (b) overcoats, (c) bicycle guards: Garitee & Son, (a) \$12.50,

Philadelphia, Pa.—Three of the fifteen contracting firms who submitted bids for the removal of houses on Fifth and Sixth streets, on the line of Spring Garden street, demanded payment from the city for the work incident to the widening of the last named street, while the others offered to pay for the privilege of removing the structures in order to secure the building material. The firms offering to pay for the right to remove the buildings and the amounts proposed were as follows: H. J. Lumley, \$50; time of completion, 30 days; Michael J. McCullough, \$75, 75 days; Barrett Brothers & Co., \$498, 60 days; Allen Haldeman, \$290, 90 days; F. B. McCann, \$755, 30 days; Charles Waffles, \$300, 60 days; Hugh A. Monaghan, \$325, 90 days; Howard E. Ruch, \$225, 125 days; John O'Rourke, \$360, 60 days; A. C. McHenry, \$1,035, 70 days; Frank McCullough, \$1,010, 70 days; and Harris Abrams, \$276, 30 days. The firms demanding pay for the work and their estimates of cost were: T. P. Smart, \$300; time of completion, six months; J. J. McHugh, \$740, 24 days; and William C. Walton, \$900, 90 days.

The "Quick Repair" Idea as Related to Watson Dumping Wagons

Man out on a job with a number of dumping wagons; some of the wagons break down under the heavy work; time presses, but the broken wagon must go to the blacksmith shop for repairs; long delay, added to loss of team and man's time—and contract delays cost money.

CONTRAST THIS WITH THE MAN WHO OWNS WATSON WAGONS.

Out on a job, he carries a small number of duplicate parts as a sort of wagon insurance; Watson Wagons rarely break, but if they do, the driver can adjust a duplicate part in a jiffy: fits just like the old one, no delay, no bill at blacksmith shop.

ISN'T THIS WORTH SOMETHING TO YOU?

Better own Watsons, because the up-keep cost is so little that they are the really economical Wagon in the long run. Get a catalog.

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1019 Westinghouse Building.....PITTSBURG, PA
1329-1330 Monadnock Block.....CHICAGO, ILL.



(b) \$17, (c) \$20; D. Klein & Brother, (a) \$12.35, (b) \$17.60, (c) \$24.38; N. T. Lewis & Son, (a) \$13.40, (b) \$19.90 to \$17.40, (c) \$24; W. H. Horstman Company, (a) \$12.33, (b) \$16.96, (c) \$21; Jos. H. Snellenburg, (a) \$12.05, (b) \$17.50, (c) \$21.

Pittsburg, Pa.—Mayor George W. Guthrie and Director E. G. Lang have awarded the contract for the collection of garbage in the old city and the collection of dead animals on the North Side to the American Reduction Company, for \$186,000. The contract last year amounted to \$180,000, but the city did not then contain the wards which gained admission January 1. The North Side garbage is collected for about \$60,000 by a company which holds a contract expiring August 1. On that date a new contract, to run until February 1, 1909, will be let. The keenest bidding competition in the history of the city was witnessed when proposals on the new Eighteenth ward engine house to be built at Stanton avenue and Hawthorn street, and the engine house and police station to replace the structure at Virginia avenue and Shiloh street, in the Thirty-second ward were opened. There were eighteen bidders on each contract, and all but one bid came within the estimated cost. The Eighteenth ward house is estimated to cost \$30,000 and that in the Thirty-second must come within \$40,000.

Scranton, Pa.—There were four bidders for the removal and disposal of ashes, garbage and rubbish: William G. O'Malley, former Chief Clerk in the office of the Director of Public Works; P. F. Cummings, of 306 Connell Building; the United Contract Company, of Philadelphia; and George A. Ruch, a general contractor of Philadelphia. Mr. Cummings agrees to collect and dispose of the city's garbage, etc., using the reduction system, for \$96,000. Mr. O'Malley agrees to do the work, according to the specifications, for \$88,000, also using the reduction process. The United Contract Company offers to do the work for \$82,400, using the reduction process. As this company did not present its bid until after the time set in the advertisements for the filling of all bids with the City Controller, the other bidders objected to its being received and considered. Director Wormser decided, however, that as the bid had been received before the time set for the opening, and as the company had no time to take any unjust advantage over the other bidders, the bid would be received.

Three different propositions were submitted by George W. Ruch; he first offered to do the work in accordance with the specifications for \$88,773 a year; second, to do the work for the first year for \$126,000; second year for \$75,500; third year, \$79,000; fourth year, \$82,300, and fifth year, \$86,000. In this second proposition Mr. Ruch agrees to convey to the city the ground, building and incinerating plant, free of all cost, provided he is allowed the use of the plant during the time limit of the contract, after the city has paid the first year's payments. The third proposition is as follows: First year, \$124,000; second year, \$75,000; third year, \$79,000; fourth year, \$82,300; fifth year, \$86,000. The latter plan provides that the land shall be furnished by the city. Otherwise the offer is the same as in the second plan.

Three of the bidders agree to use the reduction process, while the other, Mr. Ruch, will use the incineration method. It was this method which was recommended to Councils by the special committee appointed to make a study of the various systems of garbage disposal in actual operation throughout the country.

Sharon, Pa.—The Fred M. Prescott Steam Pump Company, Sixtieth and Greenfield avenues, Milwaukee, Wis., have been awarded the contract by the Sharon Water Works

Company, Sharon, for a 6,000,000-gallon, triple-expansion condensing pumping engine.

William McIntyre & Sons have been awarded the contracts for paving South Main, South Irvine and South Duck streets, with vitrified brick, at about \$40,000.

Pawtucket, R. I.—The joint standing Committee on Water of Council considered bids for cast-iron pipe which had been received by the Commissioner of Public Works. Five bids were received, and the lowest bidder, Allan & Reed, of Providence, was awarded the contract. The bids call for 300 tons of 24-inch, 335 tons of 20-inch, and 27 tons of 12-inch cast-iron water pipes, together with about 23 tons of castings. All of the estimates are for what it is anticipated the Department will require during the coming season.

Chattanooga, Tenn.—Bids for the improvement of paving districts 22, 28, 29 and 30 were submitted by the West Construction Company and the Southern Paving Construction Company. The bids were referred to the City Engineer.

Nashville, Tenn.—Stewart & Bruckner have been awarded the contract by the city for furnishing iron drains for sewers, at \$1.45 per 100 pounds.—W. W. Southgate, City Engineer.

Waco, Tex.—The contract with Chas. T. Derr, of Oklahoma City, Okla., for the construction of eighteen miles of sanitary sewer recently abrogated by the city has been renewed in supplemental form, and Mr. Derr will begin work again in a short time; about two miles have been constructed.—Geo. Gurley, City Engineer.

Richmond, Va.—Jas. Fox & Son, 207 Mayo street, it is reported, have secured the contract to erect the Fairmount school, at \$26,444.

Salt Lake City, Utah.—Bids were received for sewer extensions, as follows: Strange & Maguire, \$6,159.36; Davis & Heuser, \$6,319.76; J. D. Hanley, \$6,609.48; and the Campbell Building Company, \$6,768.88. The Engineer's estimate on this work was \$6,882.12.

On No. 170, Davis & Heuser bid \$2,541.47, and the Strange & Maguire bid was exactly \$147.70 more. Campbell was the third lowest, and Hanley highest.

Tacoma, Wash.—On a bid of \$20,458, more than \$6,000 below City Engineer Frank L. Davis' estimate, N. Maruca was awarded the contract for work in Sewer District No. 174. The district comprises a considerable territory on Hosmer, Ferry, Sprague, Ash, Wilkeson and Alaska streets, between Nineteenth and Center streets. Other bids for the work were as follows: A. Gehri & Co., \$25,990; Stoll & Sweeney, \$25,770; N. A. Jones, \$22,312; Lister Construction Company, \$23,274.

Wells & Wheeler were awarded a contract for some steps in District No. 613 on a bid of \$549. The only other proposal was from Young, Lamley & Co., at \$559.

Milwaukee, Wis.—The Worden-Allen Company, city, has secured the contract for the ornamental iron work at the Auditorium, at \$64,967; H. P. Andre & Sons Company has the contract for the electrical work, at \$10,000.

Monroe, Wis.—Council has decided to close a 10-year street lighting contract with the Monroe Electric Light Company; the new magnetized light will be installed, and the service is to be at the rate of \$65 per light per year for lighting until 12:30 o'clock, with the privilege of extending the time within two years to 1 o'clock at a rate of \$69 a light; the city now has 70 lights.

Toronto, Ont., Can.—The John Inglis Company has been awarded the contract for supplying a 15,000,000-gallon pumping engine, at \$147,530, and for supplying a 6,000,000-gallon engine, at \$52,700.

Proposals

SYSTEM OF HOUSE SEWERS

Canton, Miss., March 9, 1908.
Sealed bids will be received by the Mayor and Board of Aldermen of Canton, Miss., till 8 p.m. April 9, 1908, for furnishing materials and constructing, complete, a system of house sewers, approximating seven miles of 6 to 18-inch pipe sewers. Deposit, 3 per cent. of bid. The right is reserved to reject any and all bids. For bidding blanks and other information, address Walter G. Kirkpatrick, Engineer, Jackson, Miss. Plans and specifications are on file at the office of the City Clerk.
O. S. MILLER,
Mayor.

WATER WORKS SYSTEM

Kenilworth, N. J.
Bids are asked by the Kenilworth Water Company, 220 Broadway, New York City, for the installation of a water works system, consisting of a water tower, pumping station, and about six miles of pipe. Estimated cost, \$35,000. C. C. Vermeule, Consulting Engineer. Further information can be secured from W. I. Scott, Treasurer, 220 Broadway, New York.

LAMPS FOR STREET LIGHTING

Ft. Worth, Tex., February 13, 1908.
Sealed proposals will be received by the city of Fort Worth for twelve hundred candle-power 6.6 amp. A. C. series arc lamps, complete, with inner and outer globes, lamps for street lighting.

Make bids on lots of two hundred and fifty, five hundred and seven hundred and fifty lamps. Bids will be opened April 7, 1908. The right is reserved to reject any or all bids.

J. J. NUNNALLY,
City Auditor.

WATER POWER SYSTEM

The town of Montezuma, Ga., desires bids for the construction of a canal water power system and complete pumping station.

All bids must be submitted by April 1, 1908, the Town Council reserving the right to refuse any or all bids submitted.

For details and further particulars address
DR. C. H. RICHARDSON,
Mayor.

STEAM HEATING PLANT

Port Gibson, Miss.
The Board of Supervisors of Claiborne County, Mississippi, will receive and consider plans at meeting, April 6, to put a steam heating plant in the Court House and jail.
By order of the Board.

A. K. BRASHEAR,
Clerk.

WANTS

CIVIL ENGINEER—Experienced in sewer and sewage disposal, also topographic surveying and railroad work; technical graduate; now employed; open for engagement April 1, with engineering or contracting company. Address No. 2310, care Municipal Journal and Engineer.

WANTED—Engineers, draftsmen, looking for opportunities to advance; write for list of 500 positions, free for the asking. Hapgoods, 305 Broadway, New York, or 1010 Hartford Bldg., Chicago.

Wainwright Galvanized Steel Corner Bar

For Protecting Edges of Concrete Curbs, Steps, Columns, &c. The only effective **CONCRETE EDGE PROTECTOR** offered to the contracting public.

"WAINWRIGHT PATENTS"—March 9, 1897. November 22, 1898.
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This bar is well galvanized, so it will not rust. Has a solid head, guaranteeing resistance from the heaviest possible impact of wheels or other heavy bodies, and is held in place by a dovetailed web forming an anchorage extending its full length, not only anchoring, but supporting the solid head every inch of its length. This bar has been in public use for more than ten years as the main feature of the

Wainwright Steel-Bound Concrete Curb

The Best in the World

OVER ONE MILLION FEET in Use in More than One Hundred and Fifty Cities in the United States

The dovetailed web anchors the bar at all points, resulting in great superiority over a corner protector anchored by bolts, wires or rods at intervals, allowing buckling or expansion causing ultimate loosening of the metal from the concrete. Metal parts for sale. Correspondence invited.

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